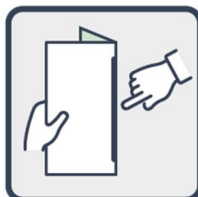




1. Prends ton niveau



2. Plie sur le trait pour cacher les solutions.



3. Ecris les réponses dans un cahier à côté, rien sur la feuille!



4. A la fin du temps accordé, compare tes réponses aux solutions.



5. Corrige tes erreurs et analyse-les.



6. Prêt pour le niveau suivant ?
Demande à passer un test.

Module I: Vocabulaire et représentation

niv.1	Vocabulaire	un sixième $\rightarrow \frac{1}{6}$	4
niv.2	Représentation jusque 1 $\rightarrow$ notation	 $\rightarrow \frac{3}{5}$	6
niv.3	Représentation $> 1 \rightarrow$ notation	 $\rightarrow \frac{3}{2}$	14
niv.4	Fraction d'un nombre $\rightarrow$ représentation	$\frac{2}{5}$ de 10 $\rightarrow$ 	22

Module II: Simplification et équivalence

niv.1	Simplification (avec support visuel)	$\frac{6}{8} \rightarrow$  $\rightarrow \frac{3}{4}$	28
niv.2	Simplification 1	$\frac{18}{24} = \rightarrow \frac{3}{4}$	35
niv.3	Simplification 2	$\frac{54}{63} = \rightarrow \frac{6}{7}$	37
niv.4	Simplification 3	$\frac{216}{234} = \rightarrow \frac{12}{13}$	39
niv.5	Equivalences et simplification	$\frac{56}{100} \rightarrow \frac{14}{25}$; 0.56 ; 56%	41

Module III: Comparaison

niv.1	Comparaison (avec support visuel)	$\frac{2}{5}$ et $\frac{1}{3} \rightarrow$  $\rightarrow \frac{2}{5} > \frac{1}{3}$	43
niv.2	Equivalences : notation, visuel, %, décim.	$\frac{6}{8} \rightarrow$  $\rightarrow 75\%$ 0,75	49

Module IV: Fraction et pourcentage d'un nombre

niv.1	Pourcentage 1	10% de 320 $\rightarrow$ 32	57
niv.2	Pourcentage 2	4% de 220 = $\rightarrow$ 8,8	58

Module V: Opérations sur les fractions addition et soustraction

niv.1	Addition / soustraction (avec support visuel)	$\frac{7}{15} + \frac{1}{3} \rightarrow$  $\rightarrow \frac{12}{15} = \frac{4}{5}$	59
niv.2	Addition (sans support visuel)	$\frac{3}{5} + \frac{2}{4} = \rightarrow \frac{11}{10}$	65
niv.3	Soustraction (sans support visuel)	$\frac{17}{14} - \frac{6}{7} = \rightarrow \frac{5}{14}$	67
niv.4	Addition / soustraction (nb négatifs)	$\frac{1}{18} - \frac{10}{9} = \rightarrow \frac{-19}{18}$	69

niv.5	Addition / soustract. de 3 fractions	$\frac{11}{19} + \frac{-9}{7} - \frac{3}{6} = \rightarrow \frac{-321}{266}$	71
Module VI : Opérations sur les fractions multiplication et division			
niv.1	Multiplication / division (avec support visuel)	$\frac{1}{4} \times 3 \rightarrow$  $\rightarrow \frac{3}{4}$	73
niv.2	Multiplication (sans support visuel)	$\frac{3}{10} \times \frac{6}{9} = \rightarrow \frac{1}{5}$	78
niv.3	Division (sans support visuel)	$\frac{5}{4} : \frac{5}{3} = \rightarrow \frac{3}{4}$	80
niv.4	Multiplication (nombres négatifs)	$\frac{-21}{8} \cdot \frac{-7}{39} = \rightarrow \frac{49}{104}$	82
niv.5	Division (nombres négatifs)	$\frac{-36}{5} : \frac{-32}{10} = \rightarrow \frac{9}{4}$	84
Module VII = Opérations sur les fractions 4 op et nb entiers			
niv.1	Quatre opérations	$\frac{3}{4} \times \frac{2}{3} = \rightarrow \frac{1}{2}$	86
niv.2	Quatre opérations (nb négatifs)	$\frac{\frac{7}{9}}{\frac{2}{8}} = \rightarrow \frac{38}{81}$	90



Vocabulaire

Nomme la fraction ou donne la fraction nommée ; indique numérateur et dénominateur.



	fraction ou nom	nom ou fraction	dénominateur	numérateur	
1	$\frac{1}{10}$	un dixième	10	1	1
2	un sixième	$\frac{1}{6}$	6	1	2
3	un tiers	$\frac{1}{3}$	3	1	3
4	$\frac{1}{2}$	un demi	2	1	4
5	un septième	$\frac{1}{7}$	7	1	5
6	$\frac{1}{4}$	un quart	4	1	6
7	un neuvième	$\frac{1}{9}$	9	1	7
8	$\frac{1}{5}$	un cinquième	5	1	8
9	$\frac{1}{8}$	un huitième	8	1	9
10	un centième	$\frac{1}{100}$	100	1	10
11	$\frac{1}{1000}$	un millième	1000	1	11
12	deux tiers	$\frac{2}{3}$	3	2	12
13	$\frac{7}{8}$	sept huitièmes	8	7	13
14	dix douzièmes	$\frac{10}{12}$	12	10	14
15	$\frac{3}{4}$	trois quarts	4	3	15
16	quatre cinquièmes	$\frac{4}{5}$	5	4	16
17	$\frac{4}{8}$	quatre huitièmes	8	4	17



Vocabulaire

Nomme la fraction ou donne la fraction nommée ; indique numérateur et dénominateur.



	fraction ou nom	nom ou fraction	dénominateur	numérateur	
18	trois vingtièmes	$\frac{3}{20}$	20	3	18
19	$\frac{2}{3}$	deux tiers	3	2	19
20	deux quarts	$\frac{2}{4}$	4	2	20
21	$\frac{6}{7}$	six septièmes	7	6	21
22	dix douzièmes	$\frac{10}{12}$	12	10	22
23	$\frac{2}{7}$	deux septièmes	7	2	23
24	deux vingtièmes	$\frac{2}{20}$	20	2	24
25	un huitième	$\frac{1}{8}$	8	1	25
26	$\frac{80}{100}$	quatre-vingt centièmes	100	80	26
27	$\frac{14}{15}$	quatorze quinzièmes	15	14	27
28	trois cinquièmes	$\frac{3}{5}$	5	3	28
29	$\frac{8}{10}$	huit dixièmes	10	8	29
30	dix treizièmes	$\frac{10}{13}$	13	10	30
31	$\frac{1}{11}$	un onzième	11	1	31
32	$\frac{5}{7}$	cinq septièmes	7	5	32

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



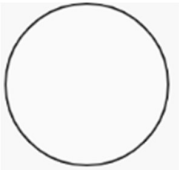
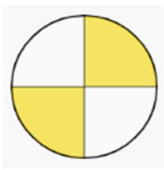
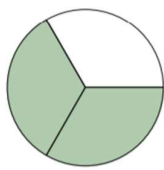
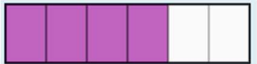
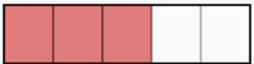
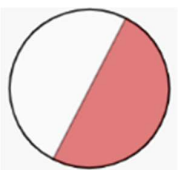
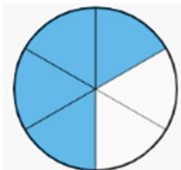
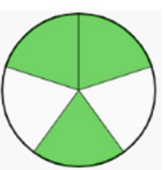
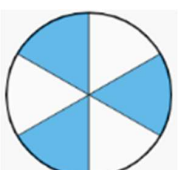
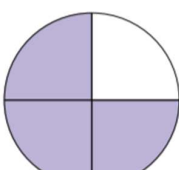
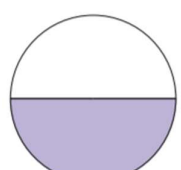
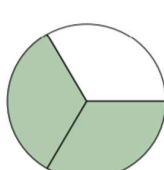
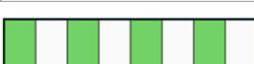
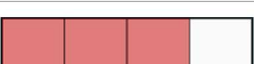
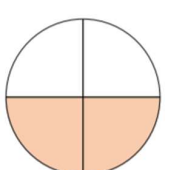
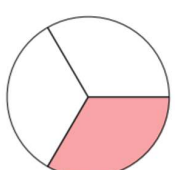
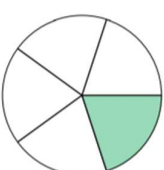
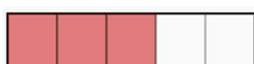
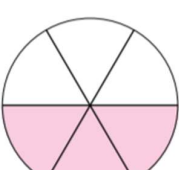
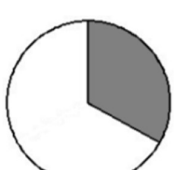
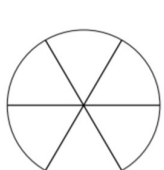
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2					$\frac{2}{4}$	$\frac{3}{6}$	$\frac{1}{3}$	2
3					$\frac{2}{3}$	$\frac{3}{4}$	$\frac{2}{5}$	3
4					$\frac{3}{4}$	$\frac{3}{5}$	$\frac{1}{2}$	4
5					$\frac{0}{2}$	$\frac{1}{4}$	$\frac{2}{4}$	5
6					$\frac{2}{4}$	$\frac{1}{3}$	$\frac{2}{2}$	6
7					$\frac{4}{8}$	$\frac{2}{6}$	$\frac{5}{8}$	7
8					$\frac{2}{3}$	$\frac{1}{2}$	$\frac{0}{6}$	8
9					$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	9
10					$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{5}$	10
11					$\frac{1}{3}$	$\frac{7}{10}$	$\frac{2}{5}$	11

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
12					$\frac{0}{1}$	$\frac{2}{4}$	$\frac{2}{3}$	12
13					$\frac{4}{6}$	$\frac{4}{10}$	$\frac{3}{5}$	13
14					$\frac{1}{2}$	$\frac{4}{6}$	$\frac{3}{5}$	14
15					$\frac{2}{4}$	$\frac{4}{10}$	$\frac{1}{3}$	15
16					$\frac{3}{6}$	$\frac{1}{5}$	$\frac{1}{1} = 1$	16
17					$\frac{3}{4}$	$\frac{1}{2}$	$\frac{2}{3}$	17
18					$\frac{2}{4}$	$\frac{4}{8}$	$\frac{3}{4}$	18
19					$\frac{2}{4}$	$\frac{1}{3}$	$\frac{1}{5}$	19
20					$\frac{1}{3}$	$\frac{3}{5}$	$\frac{2}{4}$	20
21					$\frac{3}{6}$	$\frac{1}{3}$	$\frac{0}{6}$	21

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
22					$\frac{1}{3}$	$\frac{1}{2}$	$\frac{2}{5}$	22
23					$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{5}$	23
24					$\frac{4}{6}$	$\frac{4}{10}$	$\frac{7}{10}$	24
25					$\frac{3}{6}$	$\frac{0}{1}$	$\frac{1}{3}$	25
26					$\frac{3}{8}$	$\frac{2}{6}$	$\frac{3}{3}$	26
27					$\frac{1}{2}$	$\frac{1}{1}$	$\frac{3}{4}$	27
28					$\frac{5}{10}$	$\frac{3}{4}$	$\frac{0}{2}$	28
29					$\frac{2}{2}$	$\frac{3}{5}$	$\frac{2}{3}$	29
30					$\frac{2}{2}$	$\frac{5}{8}$	$\frac{2}{5}$	30
31					$\frac{4}{6}$	$\frac{2}{4}$	$\frac{1}{5}$	31
32					$\frac{1}{4}$	$\frac{4}{10}$	$\frac{2}{3}$	32

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



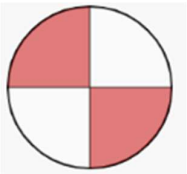
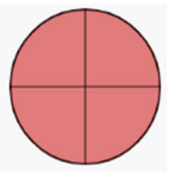
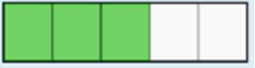
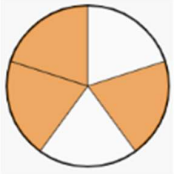
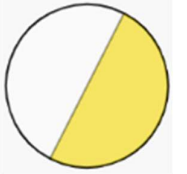
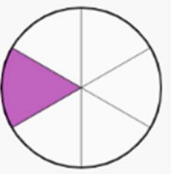
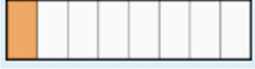
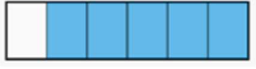
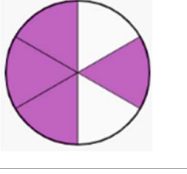
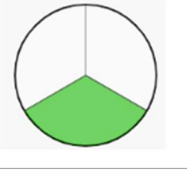
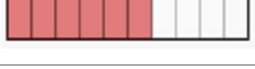
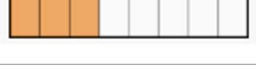
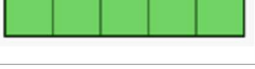
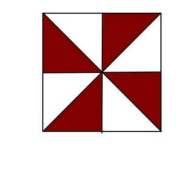
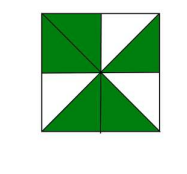
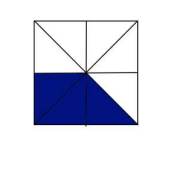
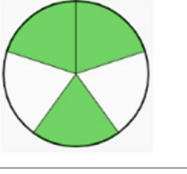
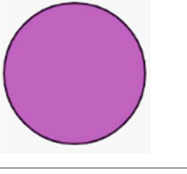
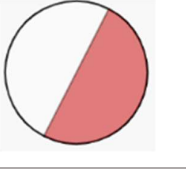
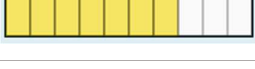
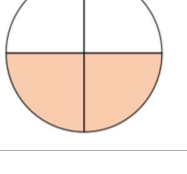
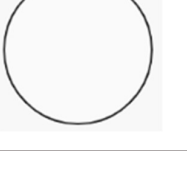
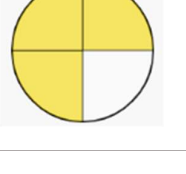
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34					$\frac{3}{6}$	$\frac{2}{3}$	$\frac{9}{10}$	34
35					$\frac{3}{4}$	$\frac{2}{5}$	$\frac{5}{6}$	35
36					$\frac{1}{4}$	$\frac{2}{5}$	$\frac{8}{8}$	36
37					$\frac{5}{5}$	$\frac{0}{6}$	$\frac{2}{3}$	37
38					$\frac{1}{2}$	$\frac{2}{6}$	$\frac{1}{3}$	38
39					$\frac{2}{2}$	$\frac{4}{5}$	$\frac{0}{4}$	39
40					$\frac{2}{10}$	$\frac{0}{4}$	$\frac{1}{5}$	40
41					$\frac{2}{3}$	$\frac{1}{4}$	$\frac{3}{6}$	41
42					$\frac{7}{8}$	$\frac{1}{2}$	$\frac{4}{6}$	42

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
43					$\frac{2}{4}$	$\frac{1}{3}$	$\frac{4}{4}$	43
44					$\frac{3}{3}$	$\frac{2}{4}$	$\frac{3}{5}$	44
45					$\frac{3}{5}$	$\frac{1}{2}$	$\frac{1}{6}$	45
46					$\frac{1}{8}$	$\frac{5}{6}$	$\frac{1}{3}$	46
47					$\frac{4}{6}$	$\frac{1}{3}$	$\frac{1}{5}$	47
48					$\frac{6}{10}$	$\frac{3}{8}$	$\frac{5}{5}$	48
49					$\frac{4}{8}$	$\frac{5}{8}$	$\frac{3}{8}$	49
50					$\frac{3}{5}$	$\frac{1}{1}$	$\frac{1}{2}$	50
51					$\frac{7}{10}$	$\frac{4}{10}$	$\frac{0}{2}$	51
52					$\frac{2}{4}$	$\frac{0}{1}$	$\frac{3}{4}$	52

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
53					$\frac{8}{8}$	$\frac{4}{6}$	$\frac{2}{6}$	53
54					$\frac{1}{2}$	$\frac{3}{5}$	$\frac{1}{3}$	54
55					$\frac{2}{10}$	$\frac{1}{3}$	$\frac{2}{5}$	55
56					$\frac{1}{5}$	$\frac{5}{6}$	$\frac{2}{4}$	56
57					$\frac{1}{4}$	$\frac{2}{4}$	$\frac{1}{2}$	57
58					$\frac{1}{3}$	$\frac{3}{6}$	$\frac{3}{6}$	58
59					$\frac{4}{6}$	$\frac{4}{10}$	$\frac{1}{3}$	59
60					$\frac{2}{5}$	$\frac{0}{2}$	$\frac{4}{6}$	60
61					$\frac{3}{4}$	$\frac{1}{2}$	$\frac{2}{3}$	61
62					$\frac{2}{4}$	$\frac{4}{8}$	$\frac{3}{4}$	62

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
63					$\frac{2}{4}$	$\frac{1}{3}$	$\frac{1}{5}$	63
64					$\frac{1}{3}$	$\frac{3}{5}$	$\frac{2}{4}$	64
65					$\frac{3}{6}$	$\frac{1}{3}$	$\frac{0}{6}$	65
66					$\frac{1}{3}$	$\frac{1}{2}$	$\frac{2}{5}$	66
67					$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{5}$	67
68					$\frac{4}{6}$	$\frac{4}{10}$	$\frac{7}{10}$	68
69					$\frac{3}{5}$	$\frac{0}{4}$	$\frac{1}{3}$	69
70					$\frac{3}{8}$	$\frac{2}{6}$	$\frac{3}{3}$	70
71					$\frac{1}{2}$	$\frac{1}{1}$	$\frac{3}{4}$	71
72					$\frac{5}{10}$	$\frac{3}{4}$	$\frac{0}{2}$	72

Module 1 niveau 2

Représentation jusque 1 → notation

Ecris la fraction représentée.



	colonne 1	colonne 2	colonne 3		col 1	col 2	col 3	
73				73	$\frac{2}{2}$	$\frac{3}{5}$	$\frac{2}{3}$	
74				74	$\frac{2}{2}$	$\frac{5}{8}$	$\frac{2}{5}$	
75				75	$\frac{4}{6}$	$\frac{2}{4}$	$\frac{1}{5}$	
76				76	$\frac{1}{4}$	$\frac{4}{10}$	$\frac{2}{3}$	
77				77	$\frac{4}{6}$	$\frac{3}{6}$	$\frac{3}{6}$	
78				78	$\frac{7}{9}$	$\frac{3}{9}$	$\frac{4}{9}$	
79				79	$\frac{7}{20}$	$\frac{16}{24}$	$\frac{25}{40}$	
80				80	$\frac{3}{7}$	$\frac{4}{7}$	$\frac{6}{7}$	

Module 1 niveau 3

Représentation > 1 → notation

Ecris la fraction représentée.



représentation visuelle

frac.

1



$\frac{2}{1}$

1

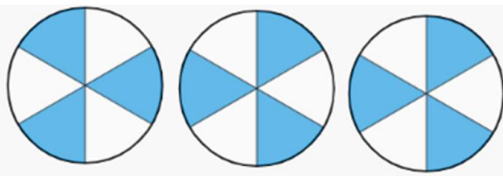
2



$\frac{3}{2}$

2

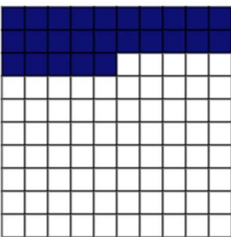
3



$\frac{9}{6}$

3

4



$\frac{25}{100}$

4

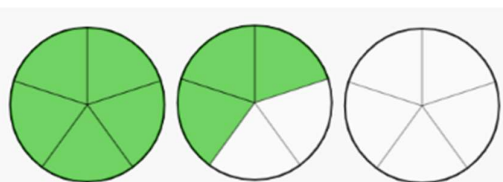
5



$\frac{7}{3}$

5

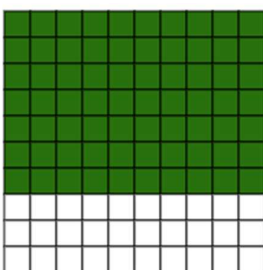
6



$\frac{8}{5}$

6

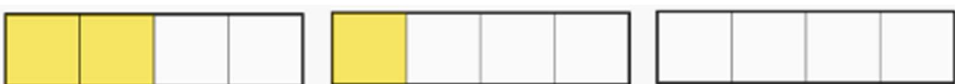
7



$\frac{70}{100}$

7

8



$\frac{3}{4}$

8



représentation visuelle

frac.

9		$\frac{3}{4}$	9
10		$\frac{69}{100}$	10
11		$\frac{6}{5}$	11
12		$\frac{3}{3}$	12
13		$\frac{42}{100}$	13
14		$\frac{6}{6}$	14
15		$\frac{3}{2}$	15

Module I niveau 3

Représentation > 1 → notation

Ecris la fraction représentée.



représentation visuelle

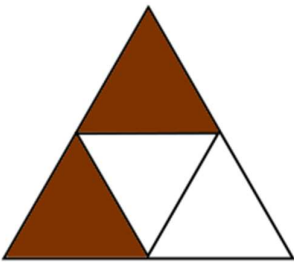
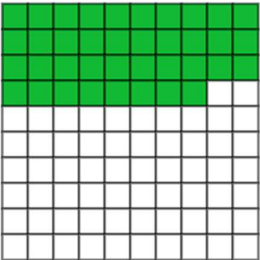
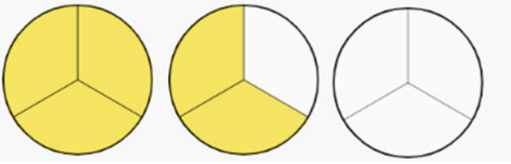
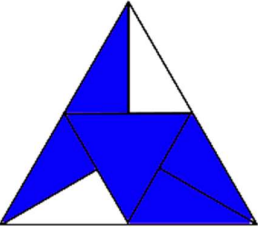
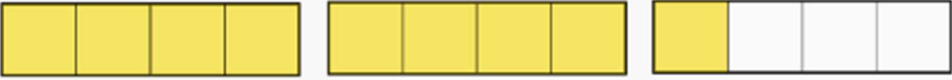
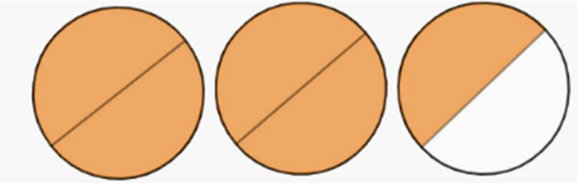
frac.

16		$\frac{1}{100}$	16
17		$\frac{12}{8}$	17
18		$\frac{3}{1}$	18
19		$\frac{88}{100}$	19
20		$\frac{6}{10}$	20
21		$\frac{11}{5}$	21
22		$\frac{5}{8}$	22



	représentation visuelle	frac.	
23		$\frac{20}{100}$	23
24		$\frac{3}{1}$	24
25		$\frac{9}{6}$	25
26		$\frac{4}{6}$	26
27		$\frac{52}{100}$	27
28		$\frac{3}{2}$	28
29		$\frac{5}{4}$	29



	représentation visuelle	frac.	
30		$\frac{2}{4}$	30
31		$\frac{38}{100}$	31
32		$\frac{3}{3}$	32
33		$\frac{5}{3}$	33
34		$\frac{6}{8}$	34
35			35
36		$\frac{9}{4}$	36
37		$\frac{5}{2}$	37



	représentation visuelle	frac.	
38		$\frac{54}{100}$	38
39		$\frac{4}{6}$	39
40		$\frac{13}{5}$	40
41		$\frac{45}{100}$	41
42		$\frac{2}{6}$	42
43		$\frac{11}{6}$	43
44		$\frac{78}{100}$	44



	représentation visuelle	frac.	
45		$\frac{4}{8}$	45
46		$\frac{11}{8}$	46
47		$\frac{99}{100}$	47
48		$\frac{5}{8}$	48
49		$\frac{22}{10}$	49
50		$\frac{3}{3}$	50
51		$\frac{9}{6}$	51
52		$\frac{1}{1}$	52



	représentation visuelle	frac.	
53		$\frac{21}{100}$	53
54		$\frac{4}{8}$	54
55		$\frac{14}{8}$	55
56		$\frac{39}{100}$	56
57		$\frac{5}{8}$	57
58		$\frac{6}{2}$	58
59		$\frac{4}{5}$	59
60		$\frac{3}{6}$	60

Module I, niveau 4

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.



	fraction	indice	solution	
1	$\frac{1}{2}$			1
2	$\frac{1}{2}$ de 4			2
3	$\frac{3}{4}$			3
4	$\frac{5}{4}$			4
5	$\frac{2}{4}$ de 4			5
6	$\frac{3}{7}$			6
7	$\frac{3}{7}$ de 14			7
8	$\frac{3}{5}$			8
9	$\frac{6}{5}$			9
10	$\frac{2}{5}$ de 10			10
11	$\frac{4}{3}$			11
12	$\frac{5}{3}$			12
13	$\frac{4}{4}$			13

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.



	fraction	indice	solution	
14	$\frac{1}{5}$ de 15			14
15	$\frac{3}{5}$ de 15			15
16	$\frac{5}{5}$ de 15			16
17	$\frac{1}{3}$			17
18	$\frac{1}{3}$ de 9			18
19	$\frac{9}{3}$			19
20	$\frac{2}{5}$			20
21	$\frac{2}{5}$ de 15			21
22	$\frac{5}{2}$			22

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.



	fraction	indice	solution	
23	$\frac{3}{13}$			23
24	$\frac{7}{13}$			24
25	$\frac{7}{5}$			25
26	$\frac{4}{5}$ de 10			26
27	$\frac{5}{2}$			27
28	1 et $\frac{1}{3}$			28
29	$\frac{1}{2}$ de 10			29
30	$\frac{1}{2}$ de 1			30
31	$\frac{7}{3}$			31
32	$\frac{5}{7}$ de 14			32
33	$\frac{2}{4}$ de 12			33

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.



	fraction	indice	solution	
34	$\frac{9}{9}$			34
35	$\frac{3}{5}$ de 15			35
36	$\frac{8}{3}$			36
37	$\frac{7}{4}$			37
38	$\frac{1}{4}$ de 12			38
39	$\frac{2}{9}$ de 9			39
40	$\frac{7}{11}$			40
41	$\frac{3}{5}$ de 10			41
42	$\frac{7}{3}$			42
43	2 et $\frac{2}{3}$			43
44	2 et $\frac{2}{5}$			44

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.

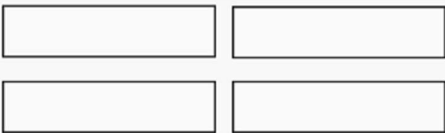
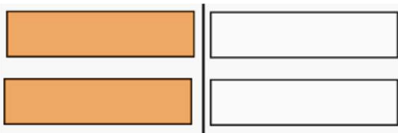
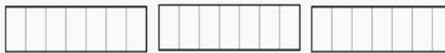
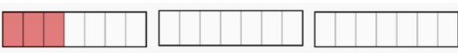
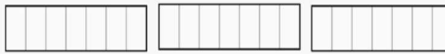
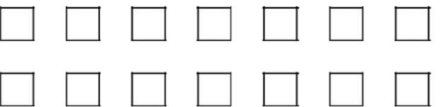
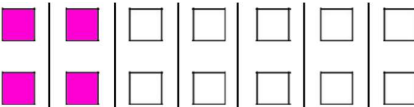
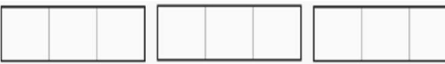
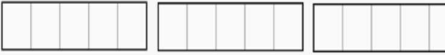
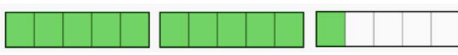
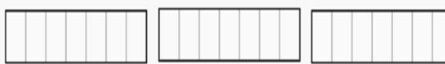
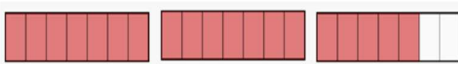
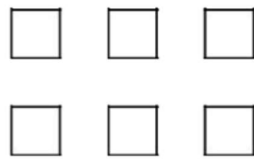
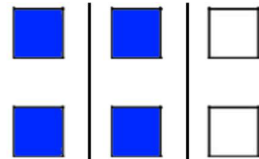
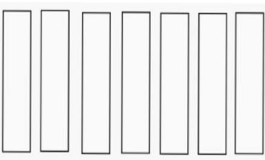
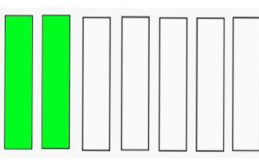
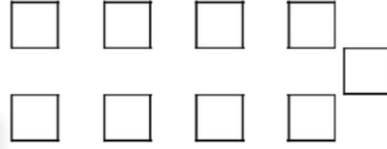
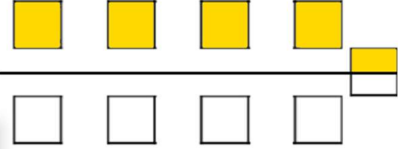


	fraction	indice	solution	
45	$\frac{2}{7}$ de 14			45
46	$\frac{9}{7}$			46
47	2 et $\frac{1}{6}$			47
48	$\frac{8}{3}$			48
49	$\frac{4}{5}$ de 10			49
50	$\frac{3}{4}$			50
51	$\frac{2}{4}$			51
52	$\frac{5}{3}$			52
53	$\frac{1}{4}$ de 12			53
54	$\frac{3}{4}$ de 16			54

Fraction d'un nombre → représentation

Représente graphiquement la fraction donnée.



	 fraction	 indice	solution	
55	$\frac{1}{2}$ de 4			55
56	$\frac{3}{7}$			56
57	$\frac{2}{7}$			57
58	$\frac{2}{7}$ de 14			58
59	$\frac{5}{3}$			59
60	2 et $\frac{1}{5}$			60
61	2 et $\frac{5}{7}$			61
62	$\frac{1}{3}$ de 3			62
63	$\frac{2}{3}$ de 6			63
64	$\frac{2}{7}$ de 7			64
65	$\frac{1}{2}$ de 9			65

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



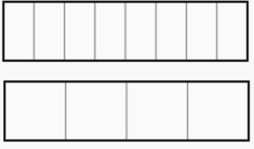
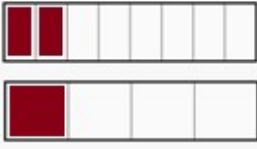
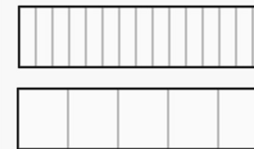
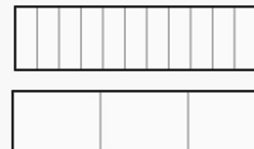
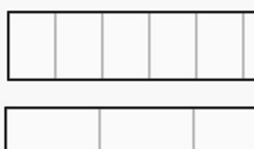
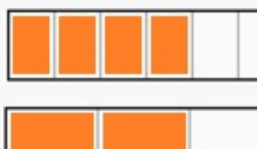
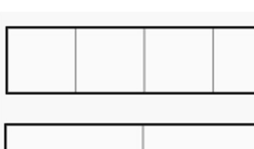
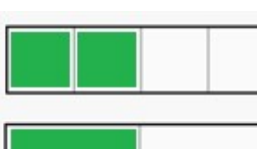
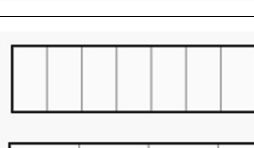
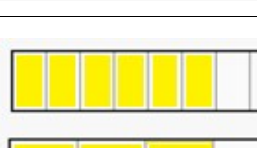
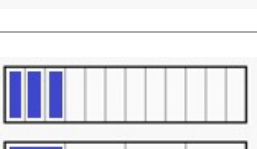
	fraction	Indice	Indice 2	solution	
1	$\frac{3}{9}$			$\frac{1}{3}$	1
2	$\frac{2}{4}$			$\frac{1}{2}$	2
3	$\frac{4}{6}$			$\frac{2}{3}$	3
4	$\frac{6}{8}$			$\frac{3}{4}$	4
5	$\frac{4}{10}$			$\frac{2}{5}$	5
6	$\frac{2}{16}$			$\frac{1}{8}$	6
7	$\frac{5}{10}$			$\frac{1}{2}$	7
8	$\frac{12}{14}$			$\frac{6}{7}$	8

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	 fraction	 Indice	 Indice 2	solution	
9	$\frac{2}{8}$			$\frac{1}{4}$	9
10	$\frac{12}{15}$			$\frac{4}{5}$	10
11	$\frac{4}{12}$			$\frac{1}{3}$	11
12	$\frac{4}{6}$			$\frac{2}{3}$	12
13	$\frac{2}{4}$			$\frac{1}{2}$	13
14	$\frac{6}{8}$			$\frac{3}{4}$	14
15	$\frac{3}{12}$			$\frac{1}{4}$	15

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	fraction	Indice	Indice 2	solution	
16	$\frac{6}{4}$			$\frac{3}{2}$	16
17	$\frac{6}{2}$			3	17
18	$\frac{5}{15}$			$\frac{1}{3}$	18
19	$\frac{4}{20}$			$\frac{1}{5}$	19
20	$\frac{3}{12}$			$\frac{1}{4}$	20
21	$\frac{2}{6}$			$\frac{1}{3}$	21
22	$\frac{3}{18}$			$\frac{1}{6}$	22
23	$\frac{4}{24}$			$\frac{1}{6}$	23

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	fraction	Indice	Indice 2	solution	
24	$\frac{5}{20}$			$\frac{1}{4}$	24
25	$\frac{3}{6}$			$\frac{1}{2}$	25
26	$\frac{3}{9}$			$\frac{1}{3}$	26
27	$\frac{2}{4}$			$\frac{1}{2}$	27
28	$\frac{2}{6}$			$\frac{1}{3}$	28
29	$\frac{6}{8}$			$\frac{3}{4}$	29
30	$\frac{4}{10}$			$\frac{2}{5}$	30

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	fraction	Indice	Indice 2	solution	
31	$\frac{2}{16}$			$\frac{1}{8}$	31
32	$\frac{5}{10}$			$\frac{1}{2}$	32
33	$\frac{12}{14}$			$\frac{6}{7}$	33
34	$\frac{2}{8}$			$\frac{1}{4}$	34
35	$\frac{12}{15}$			$\frac{4}{5}$	35
36	$\frac{4}{12}$			$\frac{1}{3}$	36
37	$\frac{4}{6}$			$\frac{2}{3}$	37
38	$\frac{2}{4}$			$\frac{1}{2}$	38

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	fraction	Indice	Indice 2	solution	
39	$\frac{6}{8}$			$\frac{3}{4}$	39
40	$\frac{3}{12}$			$\frac{1}{4}$	40
41	$\frac{6}{4}$			$\frac{3}{2}$	41
42	$\frac{6}{2}$			3	42
43	$\frac{5}{15}$			$\frac{1}{3}$	43
44	$\frac{4}{20}$			$\frac{1}{5}$	44
45	$\frac{3}{12}$			$\frac{1}{4}$	45
46	$\frac{2}{6}$			$\frac{1}{3}$	46
47	$\frac{3}{18}$			$\frac{1}{6}$	47

Module II, niveau 1

Simplification (avec support visuel)

Simplifie la fraction en passant par une représentation visuelle.



	fraction	Indice	Indice 2	solution	
48	$\frac{4}{24}$			$\frac{1}{6}$	48
49	$\frac{5}{20}$			$\frac{1}{4}$	49
50	$\frac{3}{6}$			$\frac{1}{2}$	50
51	$\frac{3}{4}$			$\frac{3}{4}$	51
52	$\frac{4}{8}$			$\frac{1}{2}$	52
53	$\frac{6}{18}$			$\frac{1}{3}$	53
54	$\frac{4}{16}$			$\frac{1}{4}$	54
55	$\frac{3}{15}$			$\frac{1}{5}$	55
56	$\frac{2}{14}$			$\frac{1}{7}$	56
57	$\frac{11}{14}$			$\frac{11}{14}$	57

Module II, niveau 2

Simplification 1

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{6}{9} =$	$\frac{16}{8} =$	$\frac{6}{9} =$	$\frac{2}{3}$	$\frac{2}{1} = 2$	$\frac{2}{3}$	1
2	$\frac{4}{8} =$	$\frac{24}{8} =$	$\frac{10}{25} =$	$\frac{1}{2}$	$\frac{3}{1} = 3$	$\frac{2}{5}$	2
3	$\frac{15}{10} =$	$\frac{12}{9} =$	$\frac{12}{18} =$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{2}{3}$	3
4	$\frac{28}{35} =$	$\frac{18}{24} =$	$\frac{6}{8} =$	$\frac{4}{5}$	$\frac{3}{4}$	$\frac{3}{4}$	4
5	$\frac{18}{24} =$	$\frac{18}{30} =$	$\frac{9}{10} =$	$\frac{3}{4}$	$\frac{3}{5}$	$\frac{9}{10}$	5
6	$\frac{20}{15} =$	$\frac{12}{18} =$	$\frac{9}{12} =$	$\frac{4}{3}$	$\frac{2}{3}$	$\frac{3}{4}$	6
7	$\frac{12}{9} =$	$\frac{21}{28} =$	$\frac{24}{18} =$	$\frac{4}{3}$	$\frac{3}{4}$	$\frac{4}{3}$	7
8	$\frac{4}{8} =$	$\frac{28}{14} =$	$\frac{8}{10} =$	$\frac{1}{2}$	$\frac{2}{1} = 2$	$\frac{4}{5}$	8
9	$\frac{8}{16} =$	$\frac{20}{10} =$	$\frac{12}{15} =$	$\frac{1}{2}$	$\frac{2}{1} = 2$	$\frac{4}{5}$	9
10	$\frac{20}{16} =$	$\frac{12}{16} =$	$\frac{6}{9} =$	$\frac{5}{4}$	$\frac{3}{4}$	$\frac{2}{3}$	10
11	$\frac{12}{30} =$	$\frac{12}{6} =$	$\frac{20}{30} =$	$\frac{2}{5}$	$\frac{2}{1} = 2$	$\frac{2}{3}$	11
12	$\frac{12}{8} =$	$\frac{6}{3} =$	$\frac{6}{12} =$	$\frac{3}{2}$	$\frac{2}{1} = 2$	$\frac{1}{2}$	12
13	$\frac{28}{35} =$	$\frac{8}{16} =$	$\frac{32}{16} =$	$\frac{4}{5}$	$\frac{1}{2}$	$\frac{2}{1} = 2$	13
14	$\frac{35}{28} =$	$\frac{8}{16} =$	$\frac{24}{12} =$	$\frac{5}{4}$	$\frac{1}{2}$	$\frac{2}{1} = 2$	14
15	$\frac{15}{20} =$	$\frac{9}{18} =$	$\frac{24}{32} =$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	15
16	$\frac{6}{20} =$	$\frac{36}{60} =$	$\frac{7}{21} =$	$\frac{3}{10}$	$\frac{3}{5}$	$\frac{1}{3}$	16
17	$\frac{15}{45} =$	$\frac{12}{28} =$	$\frac{1}{28} =$	$\frac{1}{3}$	$\frac{3}{7}$	$\frac{1}{28}$	17
18	$\frac{12}{22} =$	$\frac{30}{40} =$	$\frac{18}{28} =$	$\frac{6}{11}$	$\frac{3}{4}$	$\frac{9}{14}$	18

Module II, niveau 2

Simplification 1

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
19	$\frac{6}{42} =$	$\frac{13}{20} =$	$\frac{9}{6} =$		$\frac{1}{7}$	$\frac{13}{20}$	$\frac{3}{2}$	19
20	$\frac{37}{64} =$	$\frac{26}{28} =$	$\frac{6}{15} =$		$\frac{37}{64}$	$\frac{13}{14}$	$\frac{3}{5}$	20
21	$\frac{14}{18} =$	$\frac{2}{12} =$	$\frac{29}{29} =$		$\frac{7}{9}$	$\frac{1}{6}$	1	21
22	$\frac{12}{12} =$	$\frac{15}{39} =$	$\frac{9}{24} =$		1	$\frac{5}{13}$	$\frac{3}{8}$	22
23	$\frac{10}{14} =$	$\frac{16}{32} =$	$\frac{10}{50} =$		$\frac{5}{7}$	$\frac{1}{2}$	$\frac{1}{5}$	23
24	$\frac{28}{36} =$	$\frac{21}{27} =$	$\frac{7}{35} =$		$\frac{7}{9}$	$\frac{7}{9}$	$\frac{1}{5}$	24
25	$\frac{34}{42} =$	$\frac{17}{23} =$	$\frac{14}{28} =$		$\frac{17}{21}$	$\frac{17}{23}$	$\frac{1}{2}$	25
26	$\frac{18}{20} =$	$\frac{24}{30} =$	$\frac{16}{26} =$		$\frac{9}{10}$	$\frac{4}{5}$	$\frac{8}{13}$	26
27	$\frac{8}{26} =$	$\frac{10}{14} =$	$\frac{15}{10} =$		$\frac{4}{13}$	$\frac{5}{7}$	$\frac{3}{2}$	27
28	$\frac{15}{35} =$	$\frac{45}{50} =$	$\frac{18}{7} =$		$\frac{3}{7}$	$\frac{9}{10}$	$\frac{18}{7}$	28
29	$\frac{11}{33} =$	$\frac{24}{33} =$	$\frac{26}{32} =$		$\frac{1}{3}$	$\frac{8}{11}$	$\frac{13}{16}$	29
30	$\frac{3}{27} =$	$\frac{6}{20} =$	$\frac{5}{15} =$		$\frac{1}{9}$	$\frac{3}{10}$	$\frac{1}{3}$	30
31	$\frac{20}{35} =$	$\frac{9}{45} =$	$\frac{12}{36} =$		$\frac{4}{7}$	$\frac{1}{5}$	$\frac{1}{3}$	31
32	$\frac{10}{50} =$	$\frac{35}{14} =$	$\frac{27}{81} =$		$\frac{1}{5}$	$\frac{5}{2}$	$\frac{1}{3}$	32
33	$\frac{3}{21} =$	$\frac{20}{45} =$	$\frac{8}{12} =$		$\frac{1}{7}$	$\frac{4}{9}$	$\frac{3}{4}$	33
34	$\frac{3}{12} =$	$\frac{26}{39} =$	$\frac{30}{36} =$		$\frac{1}{4}$	$\frac{2}{3}$	$\frac{5}{6}$	34

Simplification 2

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{72}{40} =$	$\frac{72}{108} =$	$\frac{42}{12} =$	$\frac{9}{5}$	$\frac{2}{3}$	$\frac{7}{2}$	1
2	$\frac{22}{33} =$	$\frac{77}{44} =$	$\frac{12}{24} =$	$\frac{2}{3}$	$\frac{7}{4}$	$\frac{1}{2}$	2
3	$\frac{12}{10} =$	$\frac{42}{36} =$	$\frac{21}{9} =$	$\frac{6}{5}$	$\frac{7}{6}$	$\frac{7}{3}$	3
4	$\frac{30}{100} =$	$\frac{42}{14} =$	$\frac{54}{63} =$	$\frac{3}{10}$	$\frac{3}{1}$	$\frac{6}{7}$	4
5	$\frac{63}{35} =$	$\frac{27}{63} =$	$\frac{14}{12} =$	$\frac{9}{5}$	$\frac{3}{7}$	$\frac{7}{6}$	5
6	$\frac{40}{72} =$	$\frac{55}{88} =$	$\frac{54}{24} =$	$\frac{5}{9}$	$\frac{5}{8}$	$\frac{9}{4}$	6
7	$\frac{72}{56} =$	$\frac{27}{24} =$	$\frac{55}{66} =$	$\frac{9}{7}$	$\frac{9}{8}$	$\frac{5}{6}$	7
8	$\frac{12}{24} =$	$\frac{20}{24} =$	$\frac{44}{99} =$	$\frac{1}{2}$	$\frac{5}{6}$	$\frac{4}{9}$	8
9	$\frac{24}{28} =$	$\frac{36}{24} =$	$\frac{56}{24} =$	$\frac{6}{7}$	$\frac{3}{2}$	$\frac{7}{3}$	9
10	$\frac{45}{18} =$	$\frac{90}{63} =$	$\frac{15}{12} =$	$\frac{5}{2}$	$\frac{10}{7}$	$\frac{5}{4}$	10
11	$\frac{45}{15} =$	$\frac{8}{16} =$	$\frac{30}{40} =$	$\frac{3}{1}$	$\frac{1}{2}$	$\frac{3}{4}$	11
12	$\frac{30}{15} =$	$\frac{30}{24} =$	$\frac{21}{35} =$	$\frac{2}{1}$	$\frac{5}{4}$	$\frac{3}{5}$	12
13	$\frac{9}{27} =$	$\frac{35}{56} =$	$\frac{21}{9} =$	$\frac{1}{3}$	$\frac{5}{8}$	$\frac{7}{3}$	13
14	$\frac{21}{24} =$	$\frac{25}{10} =$	$\frac{24}{48} =$	$\frac{7}{8}$	$\frac{5}{2}$	$\frac{1}{2}$	14
15	$\frac{42}{35} =$	$\frac{66}{44} =$	$\frac{21}{56} =$	$\frac{6}{5}$	$\frac{3}{2}$	$\frac{3}{8}$	15
16	$\frac{48}{32} =$	$\frac{16}{12} =$	$\frac{36}{27} =$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{4}{3}$	16
17	$\frac{72}{63} =$	$\frac{28}{35} =$	$\frac{20}{15} =$	$\frac{8}{7}$	$\frac{4}{5}$	$\frac{4}{3}$	17

Module II, niveau 3

Simplification 2

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$\frac{18}{48} =$	$\frac{50}{30} =$	$\frac{24}{32} =$	$\frac{3}{8}$	$\frac{5}{3}$	$\frac{3}{4}$	18
19	$\frac{63}{45} =$	$\frac{15}{12} =$	$\frac{21}{35} =$	$\frac{7}{5}$	$\frac{5}{4}$	$\frac{3}{5}$	19
20	$\frac{12}{4} =$	$\frac{12}{16} =$	$\frac{33}{44} =$	$\frac{3}{1}$	$\frac{3}{4}$	$\frac{3}{4}$	20
21	$\frac{24}{48} =$	$\frac{30}{24} =$	$\frac{18}{27} =$	$\frac{1}{2}$	$\frac{5}{4}$	$\frac{2}{3}$	21
22	$\frac{14}{35} =$	$\frac{12}{30} =$	$\frac{24}{40} =$	$\frac{2}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	22
23	$\frac{108}{48} =$	$\frac{20}{10} =$	$\frac{16}{20} =$	$\frac{9}{4}$	$\frac{2}{1}$	$\frac{4}{5}$	23
24	$\frac{54}{42} =$	$\frac{15}{12} =$	$\frac{55}{33} =$	$\frac{9}{7}$	$\frac{5}{4}$	$\frac{5}{3}$	24
25	$\frac{70}{35} =$	$\frac{12}{18} =$	$\frac{20}{25} =$	$\frac{2}{1}$	$\frac{2}{3}$	$\frac{4}{5}$	25
26	$\frac{15}{30} =$	$\frac{12}{15} =$	$\frac{35}{21} =$	$\frac{1}{2}$	$\frac{4}{5}$	$\frac{5}{3}$	26
27	$\frac{81}{36} =$	$\frac{8}{6} =$	$\frac{20}{25} =$	$\frac{9}{4}$	$\frac{4}{3}$	$\frac{4}{5}$	27
28	$\frac{6}{27} =$	$\frac{21}{35} =$	$\frac{21}{42} =$	$\frac{2}{9}$	$\frac{3}{5}$	$\frac{3}{6}$	28
29	$\frac{54}{81} =$	$\frac{45}{27} =$	$\frac{44}{33} =$	$\frac{2}{3}$	$\frac{5}{3}$	$\frac{4}{3}$	29
30	$\frac{48}{24} =$	$\frac{20}{16} =$	$\frac{8}{16} =$	$\frac{2}{1}$	$\frac{5}{4}$	$\frac{1}{2}$	30
31	$\frac{54}{18} =$	$\frac{13}{52} =$	$\frac{4}{88} =$	$\frac{3}{1}$	$\frac{1}{4}$	$\frac{1}{22}$	31
32	$\frac{14}{8} =$	$\frac{88}{32} =$	$\frac{35}{90} =$	$\frac{7}{4}$	$\frac{11}{4}$	$\frac{7}{18}$	32
33	$\frac{66}{33} =$	$\frac{66}{42} =$	$\frac{16}{12} =$	$\frac{2}{1}$	$\frac{11}{7}$	$\frac{4}{3}$	33
34	$\frac{28}{16} =$	$\frac{30}{16} =$	$\frac{17}{34} =$	$\frac{7}{4}$	$\frac{15}{8}$	$\frac{1}{2}$	34

Module II, niveau 4

Simplification 3

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
1	$\frac{342}{162} =$	$\frac{30}{70} =$	$\frac{85}{45} =$		$\frac{19}{9}$	$\frac{3}{7}$	$\frac{17}{9}$	1
2	$\frac{117}{72} =$	$\frac{64}{80} =$	$\frac{260}{100} =$		$\frac{13}{8}$	$\frac{4}{5}$	$\frac{13}{5}$	2
3	$\frac{42}{57} =$	$\frac{20}{14} =$	$\frac{280}{160} =$		$\frac{14}{19}$	$\frac{10}{7}$	$\frac{7}{4}$	3
4	$\frac{140}{280} =$	$\frac{216}{234} =$	$\frac{240}{180} =$		$\frac{1}{2}$	$\frac{12}{13}$	$\frac{4}{3}$	4
5	$\frac{256}{272} =$	$\frac{162}{45} =$	$\frac{150}{180} =$		$\frac{16}{17}$	$\frac{18}{5}$	$\frac{5}{6}$	5
6	$\frac{117}{54} =$	$\frac{133}{119} =$	$\frac{45}{90} =$		$\frac{13}{6}$	$\frac{19}{17}$	$\frac{1}{2}$	6
7	$\frac{128}{120} =$	$\frac{54}{72} =$	$\frac{120}{42} =$		$\frac{16}{15}$	$\frac{3}{4}$	$\frac{20}{7}$	7
8	$\frac{6}{34} =$	$\frac{150}{225} =$	$\frac{126}{238} =$		$\frac{3}{17}$	$\frac{2}{3}$	$\frac{9}{17}$	8
9	$\frac{170}{150} =$	$\frac{180}{156} =$	$\frac{18}{36} =$		$\frac{17}{15}$	$\frac{15}{13}$	$\frac{1}{2}$	9
10	$\frac{27}{153} =$	$\frac{90}{72} =$	$\frac{228}{96} =$		$\frac{3}{17}$	$\frac{5}{4}$	$\frac{19}{8}$	10
11	$\frac{156}{192} =$	$\frac{228}{72} =$	$\frac{226}{140} =$		$\frac{13}{16}$	$\frac{19}{6}$	$\frac{113}{70}$	11
12	$\frac{258}{304} =$	$\frac{198}{121} =$	$\frac{273}{294} =$		$\frac{129}{152}$	$\frac{18}{11}$	$\frac{13}{14}$	12
13	$\frac{24}{180} =$	$\frac{204}{289} =$	$\frac{9}{6} =$		$\frac{2}{15}$	$\frac{12}{17}$	$\frac{3}{2}$	13
14	$\frac{130}{221} =$	$\frac{90}{195} =$	$\frac{102}{42} =$		$\frac{10}{17}$	$\frac{6}{13}$	$\frac{17}{7}$	14
15	$\frac{280}{260} =$	$\frac{84}{399} =$	$\frac{238}{112} =$		$\frac{14}{13}$	$\frac{4}{19}$	$\frac{17}{8}$	15
16	$\frac{72}{108} =$	$\frac{210}{105} =$	$\frac{72}{40} =$		$\frac{2}{3}$	$\frac{2}{1}$	$\frac{9}{5}$	1
17	$\frac{39}{156} =$	$\frac{16}{68} =$	$\frac{288}{80} =$		$\frac{1}{4}$	$\frac{4}{17}$	$\frac{18}{5}$	17

Module II, niveau 4

Simplification 3

Simplifie la fraction.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$\frac{170}{20} =$	$\frac{210}{182} =$	$\frac{27}{54} =$	$\frac{17}{2}$	$\frac{15}{13}$	$\frac{1}{2}$	18
19	$\frac{30}{255} =$	$\frac{153}{36} =$	$\frac{352}{242} =$	$\frac{2}{17}$	$\frac{17}{4}$	$\frac{16}{11}$	19
20	$\frac{260}{247} =$	$\frac{228}{209} =$	$\frac{34}{68} =$	$\frac{20}{19}$	$\frac{12}{11}$	$\frac{1}{2}$	20
21	$\frac{84}{144} =$	$\frac{36}{63} =$	$\frac{170}{204} =$	$\frac{7}{12}$	$\frac{4}{7}$	$\frac{5}{6}$	21
22	$\frac{48}{192} =$	$\frac{378}{399} =$	$\frac{55}{198} =$	$\frac{1}{4}$	$\frac{18}{19}$	$\frac{5}{18}$	22
23	$\frac{182}{260} =$	$\frac{360}{162} =$	$\frac{99}{108} =$	$\frac{7}{10}$	$\frac{20}{9}$	$\frac{11}{12}$	23
24	$\frac{24}{8} =$	$\frac{44}{12} =$	$\frac{55}{209} =$	$\frac{3}{1}$	$\frac{11}{3}$	$\frac{5}{19}$	24
25	$\frac{238}{153} =$	$\frac{110}{396} =$	$\frac{132}{374} =$	$\frac{14}{9}$	$\frac{5}{18}$	$\frac{6}{17}$	25
26	$\frac{104}{39} =$	$\frac{75}{195} =$	$\frac{42}{56} =$	$\frac{8}{3}$	$\frac{5}{13}$	$\frac{3}{4}$	26
27	$\frac{42}{63} =$	$\frac{208}{128} =$	$\frac{204}{60} =$	$\frac{2}{3}$	$\frac{13}{8}$	$\frac{17}{5}$	27
28	$\frac{72}{108} =$	$\frac{143}{65} =$	$\frac{63}{399} =$	$\frac{2}{3}$	$\frac{11}{5}$	$\frac{3}{19}$	28
29	$\frac{91}{49} =$	$\frac{198}{165} =$	$\frac{36}{135} =$	$\frac{13}{7}$	$\frac{6}{5}$	$\frac{4}{15}$	29
30	$\frac{247}{57} =$	$\frac{160}{100} =$	$\frac{16}{28} =$	$\frac{13}{3}$	$\frac{8}{5}$	$\frac{4}{7}$	30
31	$\frac{182}{260} =$	$\frac{55}{209} =$	$\frac{48}{72} =$	$\frac{7}{10}$	$\frac{5}{19}$	$\frac{8}{12}$	31
32	$\frac{360}{162} =$	$\frac{108}{13} =$	$\frac{42}{56} =$	$\frac{20}{9}$	$\frac{8}{1}$	$\frac{3}{4}$	32
33	$\frac{99}{108} =$	$\frac{110}{396} =$	$\frac{16}{28} =$	$\frac{11}{12}$	$\frac{5}{18}$	$\frac{2}{7}$	33
34	$\frac{24}{8} =$	$\frac{104}{39} =$	$\frac{36}{135} =$	$\frac{3}{1}$	$\frac{8}{3}$	$\frac{4}{15}$	34

Module II, niveau 5

Equivalences et simplification

Indique les représentations manquantes.



	fraction irréductible	fraction dont le dénominateur est 100	Notation décimale	pourcents		solutions
1	$\frac{1}{5}$				1	$\frac{20}{100}$; 0.2 ; 20%
2		$\frac{56}{100}$			2	$\frac{14}{25}$; 0.56 ; 56%
3			0.6		3	$\frac{3}{5}$; $\frac{60}{100}$; 60%
4				50%	4	$\frac{1}{2}$; $\frac{50}{100}$; 0.5
5	$\frac{16}{25}$				5	$\frac{64}{100}$; 0.64 ; 64%
6		$\frac{70}{100}$			6	$\frac{7}{10}$; 0.7 ; 70%
7			0.4		7	$\frac{2}{5}$; $\frac{40}{100}$; 40%
8				84%	8	$\frac{21}{25}$; $\frac{84}{100}$; 0.84
9	$\frac{13}{25}$				9	$\frac{52}{100}$; 0.52 ; 52 %
10		$\frac{65}{100}$			10	$\frac{13}{20}$; 0.65 ; 65%
11			0.49		11	$\frac{49}{100}$; $\frac{49}{100}$; 49 %
12				29%	12	$\frac{29}{100}$; $\frac{29}{100}$; 0.29
13	$\frac{22}{25}$				13	$\frac{88}{100}$; 0.88 ; 88%
14		$\frac{20}{100}$			14	$\frac{1}{5}$; 0.2 ; 20%
15			0.75		15	$\frac{3}{4}$; $\frac{75}{100}$; 75%
16				70%	16	$\frac{7}{10}$; $\frac{70}{100}$; 0.7
17	$\frac{2}{5}$				17	$\frac{40}{100}$; 0.4 ; 40%

Module II, niveau 5

Equivalences et simplification

Indique les représentations manquantes.



	fraction irréductible	fraction dont le dénominateur est 100	Notation décimale	pourcents		solutions
18		$\frac{60}{100}$			18	$\frac{3}{5}$; 0.6 ; 60%
19			0.9		19	$\frac{9}{10}$; $\frac{90}{100}$; 90%
20				80%	20	$\frac{4}{5}$; $\frac{80}{100}$; 0.8
21	$\frac{49}{100}$				21	$\frac{49}{100}$; 0.49; 49%
22		$\frac{64}{100}$			22	$\frac{16}{25}$; 0.64; 64%
23			0.5		23	$\frac{1}{2}$; $\frac{50}{100}$; 50%
24				55%	24	$\frac{11}{20}$; $\frac{55}{100}$; 0.55
25	$\frac{17}{100}$				25	$\frac{17}{100}$; 0.17; 17%
26		$\frac{52}{100}$			26	$\frac{13}{25}$; 0.52; 52%
27			0.75		27	$\frac{3}{4}$; $\frac{75}{100}$; 75%
28				20%	28	$\frac{1}{5}$; $\frac{20}{100}$; 0.2
29	$\frac{1}{4}$				29	$\frac{25}{100}$; 0.25; 25%
30		$\frac{8}{100}$			30	$\frac{2}{25}$; 0.08; 8%
31			0.60		31	$\frac{6}{10}$; $\frac{60}{100}$; 60%
32				30%	32	$\frac{3}{10}$; $\frac{30}{100}$; 0.3
33	$\frac{1}{10}$				33	$\frac{10}{100}$; 0.1; 10%
34		$\frac{98}{100}$			34	$\frac{49}{50}$; 0.98; 98%

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



	fractions	indice 1	Indice 2	solution	
1	$\frac{1}{2}$ et $\frac{1}{3}$			$\frac{1}{2} > \frac{1}{3}$	1
2	$\frac{2}{3}$ et $\frac{3}{4}$			$\frac{3}{4} > \frac{2}{3}$	2
3	$\frac{1}{4}$ et $\frac{1}{7}$			$\frac{1}{4} > \frac{1}{7}$	3
4	$\frac{2}{5}$ et $\frac{1}{3}$			$\frac{2}{5} > \frac{1}{3}$	4
5	$\frac{2}{5}$ et $\frac{4}{6}$			$\frac{4}{6} > \frac{2}{5}$	5
6	$\frac{2}{2}$ et $\frac{4}{5}$			$\frac{2}{2} > \frac{4}{5}$	6
7	$\frac{1}{7}$ et $\frac{2}{10}$			$\frac{1}{7} < \frac{2}{10}$	7
8	$\frac{1}{8}$ et $\frac{1}{9}$			$\frac{1}{8} > \frac{1}{9}$	8
9	$\frac{5}{7}$ et $\frac{2}{3}$			$\frac{5}{7} > \frac{2}{3}$	9

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



	fractions	indice 1	Indice 2	solution	
10	$\frac{5}{6}$ et $\frac{1}{1}$			$\frac{5}{6} < \frac{1}{1}$	10
11	$\frac{4}{5}$ et $\frac{1}{3}$			$\frac{4}{5} > \frac{1}{3}$	11
12	$\frac{1}{4}$ et $\frac{2}{9}$			$\frac{1}{4} > \frac{2}{9}$	12
13	$\frac{2}{3}$ et $\frac{1}{2}$			$\frac{2}{3} > \frac{1}{2}$	13
14	$\frac{2}{2}$ et $\frac{4}{5}$			$\frac{2}{2} > \frac{4}{5}$	14
15	$\frac{1}{1}$ et $\frac{6}{7}$			$\frac{1}{1} > \frac{6}{7}$	15
16	$\frac{1}{2}$ et $\frac{1}{4}$			$\frac{1}{2} > \frac{1}{4}$	16
17	$\frac{1}{2}$ et $\frac{1}{5}$			$\frac{1}{2} > \frac{1}{5}$	17

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



	fractions	indice 1	Indice 2	solution	
18	$\frac{2}{3}$ et $\frac{6}{10}$			$\frac{2}{3} > \frac{6}{10}$	18
19	$\frac{2}{4}$ et $\frac{4}{8}$			$\frac{2}{4} = \frac{4}{8}$	19
20	$\frac{3}{5}$ et $\frac{5}{9}$			$\frac{3}{5} > \frac{5}{9}$	20
21	$\frac{4}{6}$ et $\frac{5}{7}$			$\frac{4}{6} < \frac{5}{7}$	21
22	$\frac{4}{7}$ et $\frac{3}{5}$			$\frac{4}{7} > \frac{3}{5}$	22
23	$\frac{6}{8}$ et $\frac{3}{4}$			$\frac{6}{8} = \frac{3}{4}$	23
24	$\frac{8}{9}$ et $\frac{1}{2}$			$\frac{8}{9} > \frac{1}{2}$	24
25	$\frac{4}{10}$ et $\frac{1}{3}$			$\frac{4}{10} > \frac{1}{3}$	25

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



	fractions	indice 1	Indice 2	solution	
26	$\frac{1}{4}$ et $\frac{1}{3}$			$\frac{1}{4} < \frac{1}{3}$	26
27	$\frac{3}{6}$ et $\frac{2}{5}$			$\frac{3}{6} > \frac{2}{5}$	27
28	$\frac{7}{8}$ et $\frac{7}{9}$			$\frac{7}{8} > \frac{7}{9}$	28
29	$\frac{2}{10}$ et $\frac{1}{5}$			$\frac{2}{10} = \frac{1}{5}$	29
30	$\frac{2}{3}$ et $\frac{5}{7}$			$\frac{2}{3} < \frac{5}{7}$	30
31	$\frac{4}{5}$ et $\frac{2}{3}$			$\frac{4}{5} > \frac{2}{3}$	31
32	$\frac{6}{7}$ et $\frac{6}{6}$			$\frac{6}{7} < \frac{6}{6}$	32
33	$\frac{4}{9}$ et $\frac{4}{8}$			$\frac{4}{9} < \frac{4}{8}$	33
34	$\frac{1}{1}$ et $\frac{1}{4}$			$\frac{1}{1} > \frac{1}{4}$	34

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



	fractions	indice 1	Indice 2	solution	
35	$\frac{5}{6}$ et $\frac{3}{4}$			$\frac{5}{6} > \frac{3}{4}$	35
36	$\frac{3}{4}$ et $\frac{8}{9}$			$\frac{3}{4} < \frac{8}{9}$	36
37	$\frac{1}{2}$ et $\frac{5}{10}$			$\frac{1}{2} = \frac{5}{10}$	37
38	$\frac{1}{1}$ et $\frac{4}{5}$			$\frac{1}{1} > \frac{4}{5}$	38
39	$\frac{3}{5}$ et $\frac{4}{7}$			$\frac{3}{5} > \frac{4}{7}$	39
40	$\frac{1}{3}$ et $\frac{2}{4}$			$\frac{1}{3} < \frac{2}{4}$	40
41	$\frac{6}{7}$ et $\frac{1}{2}$			$\frac{6}{7} > \frac{1}{2}$	41
42	$\frac{7}{9}$ et $\frac{5}{6}$			$\frac{7}{9} > \frac{5}{6}$	42

Module III, niveau 1

Comparaison (avec support visuel)

Indique un signe de comparaison entre les fractions.



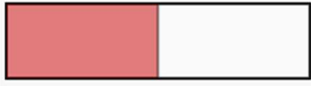
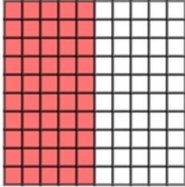
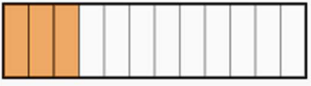
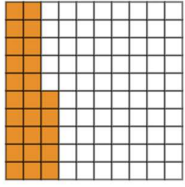
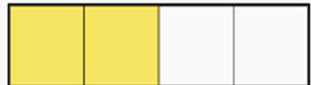
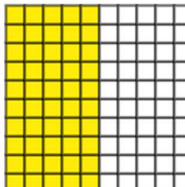
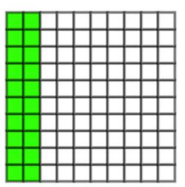
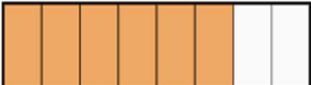
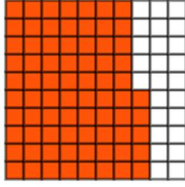
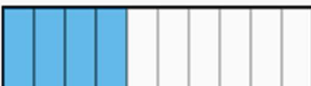
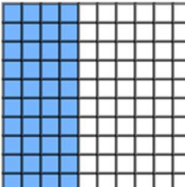
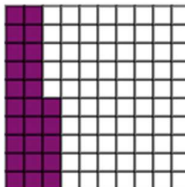
	fractions	indice 1	Indice 2	solution	
43	$\frac{3}{5}$ et $\frac{6}{8}$			$\frac{3}{5} < \frac{6}{8}$	43
44	$\frac{9}{10}$ et $\frac{4}{5}$			$\frac{9}{10} > \frac{4}{5}$	44
45	$\frac{2}{4}$ et $\frac{4}{7}$			$\frac{2}{4} < \frac{4}{7}$	45
46	$\frac{1}{2}$ et $\frac{2}{4}$			$\frac{1}{2} = \frac{2}{4}$	46
47	$\frac{6}{7}$ et $\frac{1}{1}$			$\frac{6}{7} < \frac{1}{1}$	47
48	$\frac{9}{9}$ et $\frac{1}{2}$			$\frac{9}{9} > \frac{1}{2}$	48
49	$\frac{2}{3}$ et $\frac{1}{1}$			$\frac{2}{3} < \frac{1}{1}$	49
50	$\frac{1}{7}$ et $\frac{1}{3}$			$\frac{1}{7} < \frac{1}{3}$	50

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



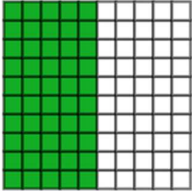
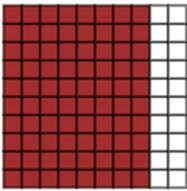
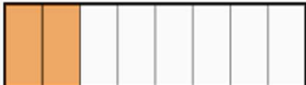
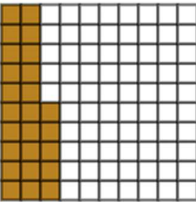
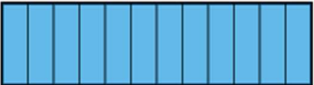
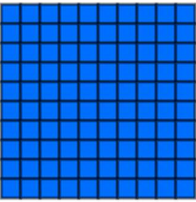
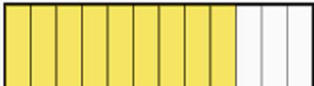
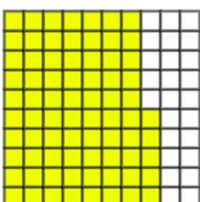
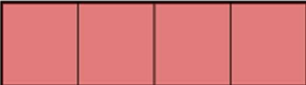
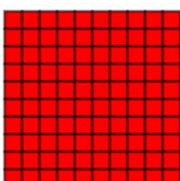
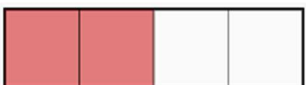
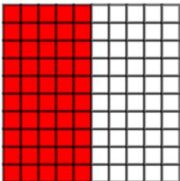
	 fraction	 indice 1	 Indice 2	solution		
1	$\frac{1}{2}$			50%	0,5	1
2	$\frac{3}{12}$			25%	0,25	2
3	$\frac{2}{4}$			50%	0,5	3
4	$\frac{3}{15}$			20%	0,2	4
5	$\frac{6}{8}$			75%	0,75	5
6	$\frac{4}{10}$			40%	0,4	6
7	$\frac{4}{16}$			25%	0,25	7

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



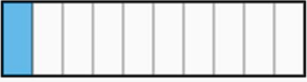
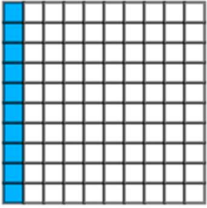
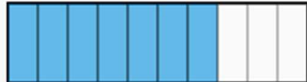
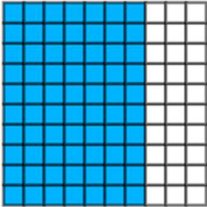
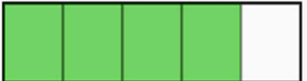
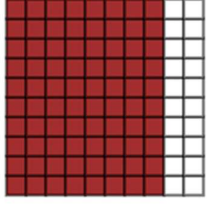
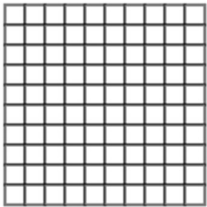
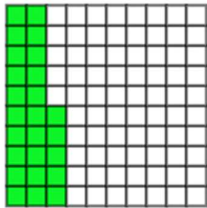
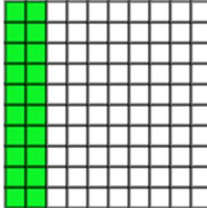
	 fraction	 indice 1	 Indice 2	solution		
8	$\frac{5}{10}$			50%	0,5	8
9	$\frac{12}{15}$			80%	0,8	9
10	$\frac{2}{8}$			25%	0,25	10
11	$\frac{12}{12}$			100%	1	11
12	$\frac{9}{12}$			75%	0,75	12
13	$\frac{4}{4}$			100%	1	13
14	$\frac{2}{4}$			50%	0,5	14

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



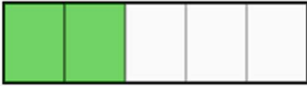
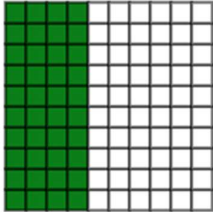
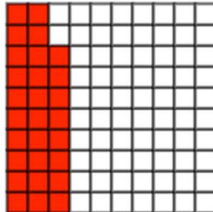
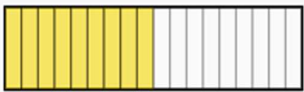
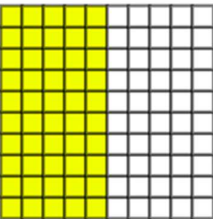
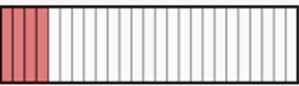
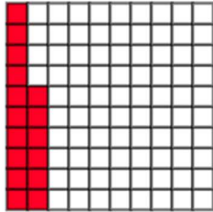
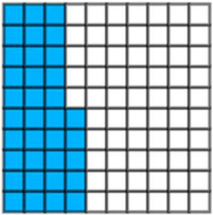
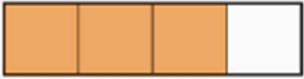
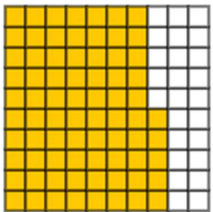
	 fraction	 indice 1	 Indice 2	solution		
15	$\frac{1}{10}$			10%	0,1	15
16	$\frac{7}{10}$			70%	0,7	16
17	$\frac{4}{5}$			80%	0,8	17
18	$\frac{0}{2}$			0%	0	18
19	$\frac{5}{20}$			25%	0,25	19
20	$\frac{4}{20}$			20%	0,2	20

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



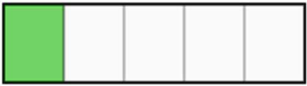
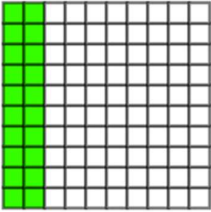
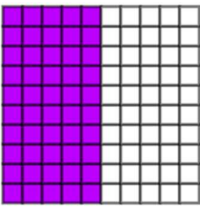
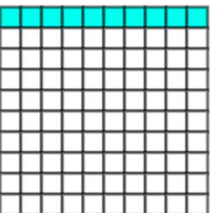
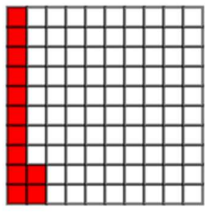
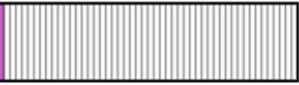
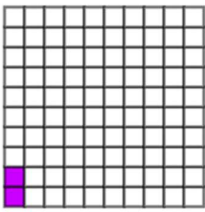
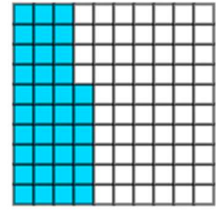
	 fraction	 indice 1	 Indice 2	solution		
21	$\frac{2}{5}$			40%	0,4	21
22	$\frac{7}{25}$			28%	0,28	22
23	$\frac{9}{18}$			50%	0,5	23
24	$\frac{4}{25}$			16%	0,16	24
25	$\frac{7}{20}$			35%	0,35	25
26	$\frac{3}{4}$			75%	0,75	26

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



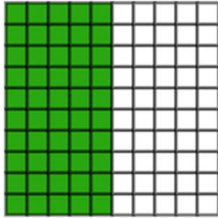
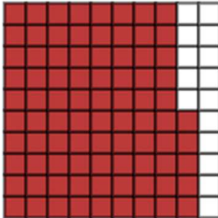
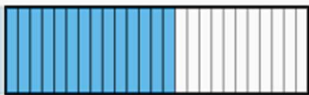
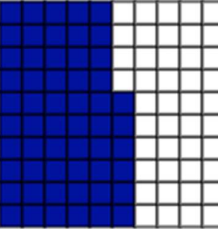
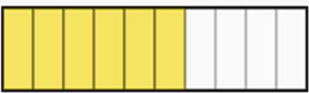
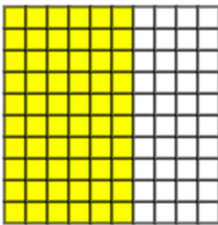
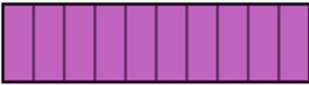
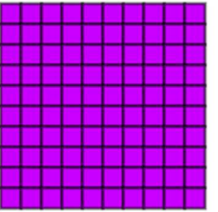
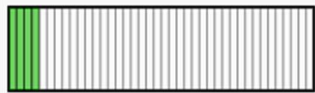
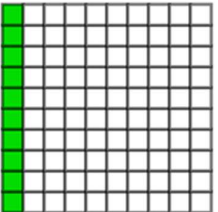
	 fraction	 indice 1	 Indice 2	solution		
27	$\frac{1}{5}$			20%	0,2	27
28	$\frac{1}{2}$			50%	0,5	28
29	$\frac{2}{20}$			10%	0,1	29
30	$\frac{3}{25}$			12%	0,12	30
31	$\frac{1}{50}$			2%	0,02	31
32	$\frac{9}{25}$			36%	0,36	32

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



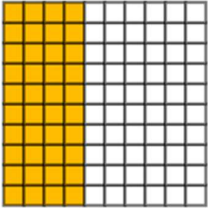
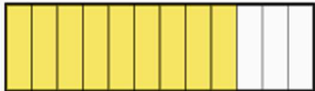
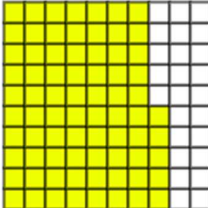
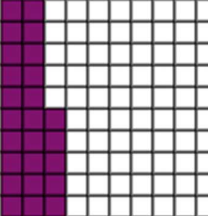
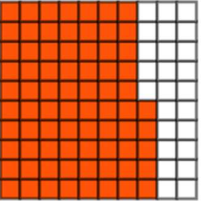
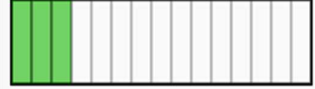
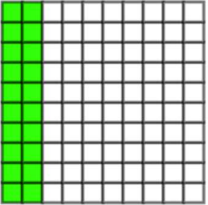
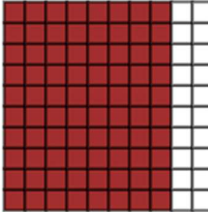
	 fraction	 indice 1	 Indice 2	solution		
33	$\frac{25}{50}$			50%	0,5	33
34	$\frac{17}{20}$			85%	0,85	34
35	$\frac{14}{25}$			56%	0,56	35
36	$\frac{6}{10}$			60%	0,6	36
37	$\frac{10}{10}$			100%	1	37
38	$\frac{4}{40}$			10%	0,1	38

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



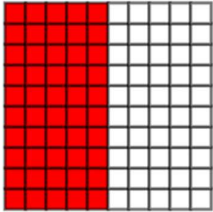
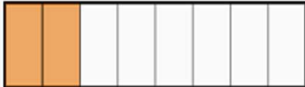
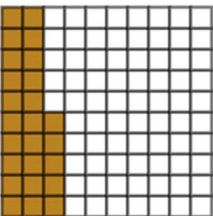
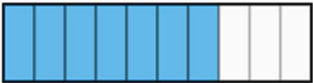
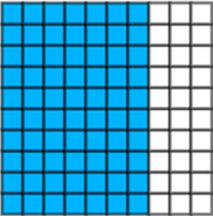
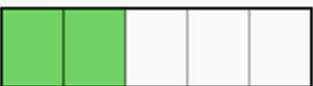
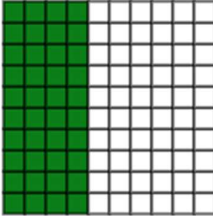
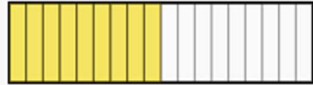
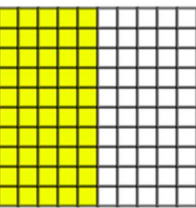
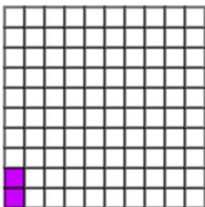
	 fraction	 indice 1	 Indice 2	solution	
39	$\frac{8}{20}$			40%	0,4
40	$\frac{9}{12}$			75%	0,75
41	$\frac{4}{16}$			25%	0,25
42	$\frac{6}{8}$			75%	0,75
43	$\frac{3}{15}$			20%	0,2
44	$\frac{12}{15}$			80%	0,8

Module III, niveau 2

Equivalences : notation, visuel, %, décim.

Indique la fraction en pourcentage et en notation décimale.



	 fraction	 indice 1	 Indice 2	solution		
45	$\frac{2}{4}$			50%	0,5	45
46	$\frac{2}{8}$			25%	0,25	46
47	$\frac{7}{10}$			70%	0,7	47
48	$\frac{2}{5}$			40%	0,4	48
49	$\frac{9}{18}$			50%	0,5	49
50	$\frac{1}{50}$			2%	0,02	50



Pourcentage 1

Calcule les expressions suivantes.



	colonne 1	colonne 2	col1	col2	
1	50% de 130 =	10% de 150 =	65	15	1
2	25% de 680 =	75% de 400 =	170	300	2
3	75% de 300 =	10% de 750 =	225	75	3
4	25% de 340 =	20% de 980 =	85	196	4
5	50% de 390 =	0% de 0 =	195	0	5
6	75% de 660 =	25% de 840 =	495	210	6
7	10% de 580 =	10% de 100 =	58	10	7
8	50% de 740 =	25% de 580 =	370	145	8
9	50% de 900 =	50% de 460 =	450	230	9
10	10% de 320 =	10% de 950 =	32	95	10
11	100% de 0 =	25% de 900 =	0	225	11
12	10% de 230 =	50% de 350 =	23	175	12
13	25% de 800 =	10% de 610 =	200	61	13
14	75% de 200 =	50% de 360 =	150	180	14
15	50% de 980 =	100% de 0 =	490	0	15
16	10% de 1000 =	1% de 300 =	100	3	16
17	50% de 220 =	25% de 1000 =	110	250	17
18	75% de 480 =	1% de 900 =	360	9	18
19	25% de 400 =	100% de 590 =	100	590	19
20	50% de 750 =	10% de 720 =	375	72	20



Pourcentage 2

Calcule les expressions suivantes.



	colonne 1	colonne 2	col1	col2	
1	1% de 860 =	75% de 380 =	8.6	285	1
2	60% de 950 =	70% de 130 =	570	91	2
3	30% de 12 =	20% de 180 =	3,6	36	3
4	60% de 150 =	50% de 301 =	90	150,5	4
5	70% de 620 =	4% de 660 =	434	26.4	5
6	60% de 150 =	80% de 770 =	90	616	6
7	40% de 420 =	3% de 700 =	168	21	7
8	1% de 120 =	60% de 290 =	1.2	174	8
9	40% de 650 =	1% de 670 =	260	6.7	9
10	2% de 120 =	75% de 730 =	2,4	547.5	10
11	90% de 90 =	4% de 120 =	81	4.8	11
12	4% de 230 =	70% de 870 =	9,2	609	12
13	2% de 180 =	25% de 730 =	3.6	182.5	13
14	60% de 590 =	5% de 430 =	354	21.5	14
15	2% de 920 =	80% de 410 =	18.4	328	15
16	40% de 930 =	30% de 410 =	372	123	16
17	55% de 120 =	60% de 940 =	66	564	17
18	70% de 130 =	20% de 760	91	152	18
19	1% de 230 =	25% de 480 =	2.3	120	19
20	2% de 740 =	50% de 320 =	14.8	160	20

Module V, niveau 1

Addition / soustraction (avec support visuel)



Résous ces additions/soustractions de fractions.

	fractions	Indice 1	indice 2	solution		
1	$\frac{1}{2} + \frac{1}{4}$			$\frac{2}{4} + \frac{1}{4}$	$\frac{3}{4}$	1
2	$\frac{5}{7} - \frac{3}{7}$			/	$\frac{2}{7}$	2
3	$\frac{2}{3} - \frac{3}{3}$			/	$-\frac{1}{3}$	3
4	$\frac{1}{2} + \frac{2}{6}$			$\frac{3}{6} + \frac{2}{6}$	$\frac{5}{6}$	4
5	$\frac{2}{5} + \frac{3}{10}$			$\frac{4}{10} + \frac{3}{10}$	$\frac{7}{10}$	5
6	$\frac{1}{3} + \frac{5}{12}$			$\frac{4}{12} + \frac{5}{12}$	$\frac{9}{12} = \frac{3}{4}$	6
7	$\frac{7}{8} - \frac{1}{4}$			$\frac{7}{8} - \frac{2}{8}$	$\frac{5}{8}$	7
8	$\frac{15}{15} - \frac{1}{3}$			$\frac{15}{15} - \frac{5}{15}$	$\frac{10}{15} = \frac{1}{3}$	8
9	$\frac{3}{5} - \frac{5}{5}$			/	$-\frac{2}{5}$	9

Module V, niveau 1

Addition / soustraction (avec support visuel)

Résous ces additions/soustractions de fractions.



	fractions	Indice 1	indice 2	solution		
10	$\frac{5}{7} + \frac{1}{14}$			$\frac{10}{14} + \frac{1}{14}$	$\frac{11}{14}$	10
11	$\frac{1}{2} + \frac{1}{2}$			/	$\frac{2}{2} = 1$	11
12	$\frac{5}{9} - \frac{2}{3}$			$\frac{5}{9} - \frac{6}{9}$	$-\frac{1}{9}$	12
13	$\frac{1}{5} + \frac{3}{10}$			$\frac{2}{10} + \frac{3}{10}$	$\frac{5}{10} = \frac{1}{2}$	13
14	$\frac{7}{12} - \frac{3}{6}$			$\frac{7}{12} - \frac{6}{12}$	$\frac{1}{12}$	14
15	$\frac{10}{11} + \frac{1}{11}$			/	$\frac{11}{11}$	15
16	$\frac{1}{3} + \frac{2}{9}$			$\frac{3}{9} + \frac{2}{9}$	$\frac{5}{9}$	16
17	$\frac{5}{7} + \frac{1}{7}$			/	$\frac{6}{7}$	17

Module V, niveau 1

Addition / soustraction (avec support visuel)



Résous ces additions/soustractions de fractions.

	fractions	Indice 1	Indice 2	solution	
18	$\frac{3}{5} + \frac{3}{10}$			$\frac{6}{10} + \frac{3}{10}$	$\frac{9}{10}$
19	$\frac{7}{15} + \frac{1}{3}$			$\frac{7}{15} + \frac{5}{15}$	$\frac{12}{15} = \frac{4}{5}$
20	$\frac{1}{7} + \frac{3}{7}$			/	$\frac{4}{7}$
21	$\frac{2}{4} + \frac{1}{4}$			/	$\frac{3}{4}$
22	$\frac{4}{5} - \frac{2}{5}$			/	$\frac{2}{5}$
23	$\frac{1}{4} + \frac{1}{4}$			/	$\frac{2}{4} = \frac{1}{2}$
24	$\frac{1}{1} - \frac{1}{3}$			$\frac{3}{3} - \frac{1}{3}$	$\frac{2}{3}$
25	$\frac{5}{8} - \frac{7}{8}$			/	$-\frac{2}{8} = -\frac{1}{4}$

Module V, niveau 1

Addition / soustraction (avec support visuel)



Résous ces additions/soustractions de fractions.

	fractions	Indice 1	Indice 2	solution	
26	$\frac{5}{6} + \frac{1}{6}$			$\frac{6}{6} = 1$	26
27	$\frac{4}{9} + \frac{1}{3}$			$\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$	27
28	$\frac{1}{2} + \frac{1}{12}$			$\frac{6}{12} + \frac{1}{12} = \frac{7}{12}$	28
29	$\frac{1}{1} - \frac{0}{2}$			$\frac{1}{1} - \frac{0}{2} = \frac{1}{1} = 1$	29
30	$\frac{1}{5} - \frac{1}{10}$			$\frac{2}{10} - \frac{1}{10} = \frac{1}{10}$	30
31	$\frac{1}{8} + \frac{1}{2}$			$\frac{1}{8} + \frac{4}{8} = \frac{5}{8}$	31
32	$\frac{17}{20} - \frac{1}{5}$			$\frac{17}{20} - \frac{4}{20} = \frac{13}{20}$	32
33	$\frac{1}{3} + \frac{1}{3}$			$\frac{2}{3}$	33
34	$\frac{1}{4} + \frac{3}{20}$			$\frac{5}{20} + \frac{3}{20} = \frac{8}{20} = \frac{2}{5}$	34

Module V, niveau 1

Addition / soustraction (avec support visuel)

Résous ces additions/soustractions de fractions.



	fractions	Indice 1	indice 2	solution		
35	$\frac{2}{6} - \frac{2}{12}$			$\frac{2}{6} - \frac{1}{6}$	$\frac{1}{6}$	35
36	$\frac{8}{16} + \frac{1}{2}$			$\frac{1}{2} + \frac{1}{2}$	$\frac{2}{2} = 1$	36
37	$\frac{7}{9} - \frac{1}{3}$			$\frac{7}{9} - \frac{3}{9}$	$\frac{4}{9}$	37
38	$\frac{4}{15} + \frac{3}{5}$			$\frac{4}{15} + \frac{9}{15}$	$\frac{13}{15}$	38
39	$\frac{1}{7} + \frac{5}{14}$			$\frac{2}{14} + \frac{5}{14}$	$\frac{7}{14} = \frac{1}{2}$	39
40	$\frac{2}{9} + \frac{2}{6}$			$\frac{2}{9} + \frac{3}{9}$	$\frac{5}{9}$	40
41	$\frac{2}{2} - \frac{3}{4}$			$\frac{4}{4} - \frac{3}{4}$	$\frac{1}{4}$	41
42	$\frac{5}{6} + \frac{1}{12}$			$\frac{10}{12} + \frac{1}{12}$	$\frac{11}{12}$	42

Module V, niveau 1

Addition / soustraction (avec support visuel)

Résous ces additions/soustractions de fractions.



	fractions	Indice 1	indice 2	solution		
43	$\frac{7}{15} + \frac{1}{3}$			$\frac{5}{15} + \frac{7}{15}$	$\frac{12}{15} = \frac{4}{5}$	43
44	$\frac{4}{9} + \frac{5}{18}$			$\frac{8}{18} + \frac{5}{18}$	$\frac{13}{18}$	44
45	$\frac{7}{8} - \frac{15}{16}$			$\frac{14}{16} - \frac{15}{16}$	$-\frac{1}{16}$	45
46	$\frac{2}{4} - \frac{5}{12}$			$\frac{6}{12} - \frac{5}{12}$	$\frac{1}{12}$	46
47	$\frac{1}{5} + \frac{1}{10}$			$\frac{2}{10} + \frac{1}{10}$	$\frac{3}{10}$	47
48	$\frac{1}{3} - \frac{2}{6}$			$\frac{2}{6} - \frac{2}{6}$	$\frac{0}{6}$	48
49	$\frac{1}{7} + \frac{6}{7}$			/	$\frac{7}{7} = 1$	49
50	$\frac{5}{8} - \frac{3}{8}$			/	$\frac{2}{8} = \frac{1}{4}$	50

Module V, niveau 2

Addition (sans support visuel)

Additionne ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{4}{3} + \frac{3}{3} =$	$\frac{4}{5} + \frac{5}{5} =$	$\frac{3}{2} + \frac{5}{2} =$	$\frac{7}{3}$	$\frac{9}{5}$	$\frac{8}{2}$	1
2	$\frac{1}{3} + \frac{2}{3} =$	$\frac{4}{2} + \frac{5}{2} =$	$\frac{2}{4} + \frac{3}{4} =$	$\frac{3}{3} = 1$	$\frac{9}{2}$	$\frac{5}{4}$	2
3	$\frac{2}{4} + \frac{4}{3} =$	$\frac{4}{3} + \frac{2}{4} =$	$\frac{3}{5} + \frac{3}{5} =$	$\frac{11}{6}$	$\frac{11}{6}$	$\frac{6}{5}$	3
4	$\frac{4}{4} + \frac{5}{4} =$	$\frac{5}{3} + \frac{4}{5} =$	$\frac{3}{4} + \frac{2}{3} =$	$\frac{9}{4}$	$\frac{37}{15}$	$\frac{17}{12}$	4
5	$\frac{4}{5} + \frac{5}{2} =$	$\frac{2}{4} + \frac{2}{3} =$	$\frac{5}{3} + \frac{2}{5} =$	$\frac{33}{10}$	$\frac{7}{6}$	$\frac{31}{15}$	5
6	$\frac{5}{2} + \frac{4}{5} =$	$\frac{5}{4} + \frac{5}{2} =$	$\frac{3}{3} + \frac{2}{5} =$	$\frac{33}{10}$	$\frac{15}{4}$	$\frac{7}{5}$	6
7	$\frac{3}{5} + \frac{5}{4} =$	$\frac{4}{3} + \frac{4}{5} =$	$\frac{3}{5} + \frac{2}{4} =$	$\frac{37}{20}$	$\frac{32}{15}$	$\frac{11}{10}$	7
8	$\frac{2}{4} + \frac{4}{5} =$	$\frac{4}{3} + \frac{2}{4} =$	$\frac{4}{4} + \frac{3}{3} =$	$\frac{13}{10}$	$\frac{11}{6}$	$\frac{2}{1}$	8
9	$\frac{2}{2} + \frac{5}{2} =$	$\frac{2}{4} + \frac{4}{5} =$	$\frac{4}{5} + \frac{5}{3} =$	$\frac{7}{2}$	$\frac{13}{10}$	$\frac{37}{15}$	9
10	$\frac{4}{2} + \frac{4}{5} =$	$\frac{4}{5} + \frac{3}{5} =$	$\frac{4}{4} + \frac{3}{5} =$	$\frac{14}{5}$	$\frac{7}{5}$	$\frac{8}{5}$	10
11	$\frac{2}{2} + \frac{2}{3} =$	$\frac{5}{3} + \frac{2}{4} =$	$\frac{2}{2} + \frac{2}{2} =$	$\frac{5}{3}$	$\frac{13}{6}$	$\frac{2}{1}$	11
12	$\frac{3}{3} + \frac{2}{4} =$	$\frac{2}{4} + \frac{3}{5} =$	$\frac{3}{4} + \frac{3}{5} =$	$\frac{3}{2}$	$\frac{11}{10}$	$\frac{27}{20}$	12
13	$\frac{3}{2} + \frac{3}{4} =$	$\frac{3}{4} + \frac{5}{2} =$	$\frac{4}{2} + \frac{4}{3} =$	$\frac{9}{4}$	$\frac{13}{4}$	$\frac{10}{3}$	13
14	$\frac{4}{3} + \frac{3}{5} =$	$\frac{3}{3} + \frac{2}{2} =$	$\frac{5}{3} + \frac{3}{5} =$	$\frac{29}{15}$	$\frac{2}{1}$	$\frac{34}{15}$	14
15	$\frac{4}{3} + \frac{2}{5} =$	$\frac{4}{2} + \frac{4}{5} =$	$\frac{3}{3} + \frac{5}{3} =$	$\frac{26}{15}$	$\frac{14}{5}$	$\frac{8}{3}$	15
16	$\frac{4}{2} + \frac{3}{4} =$	$\frac{5}{4} + \frac{3}{5} =$	$\frac{5}{4} + \frac{3}{3} =$	$\frac{11}{4}$	$\frac{37}{20}$	$\frac{9}{4}$	16
17	$\frac{4}{5} + \frac{4}{3} =$	$\frac{2}{5} + \frac{2}{4} =$	$\frac{5}{2} + \frac{4}{2} =$	$\frac{32}{15}$	$\frac{9}{10}$	$\frac{9}{2}$	17

Module V, niveau 2

Addition (sans support visuel)

Additionne ces fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
18	$\frac{5}{4} + \frac{4}{3} =$	$\frac{2}{3} + \frac{4}{2} =$	$\frac{2}{5} + \frac{3}{4} =$		$\frac{31}{12}$	$\frac{8}{3}$	$\frac{23}{20}$	18
19	$\frac{4}{2} + \frac{5}{3} =$	$\frac{3}{4} + \frac{3}{5} =$	$\frac{3}{4} + \frac{3}{2} =$		$\frac{11}{3}$	$\frac{27}{20}$	$\frac{9}{4}$	19
20	$\frac{4}{2} + \frac{2}{5} =$	$\frac{2}{4} + \frac{5}{2} =$	$\frac{3}{2} + \frac{3}{4} =$		$\frac{12}{5}$	$\frac{3}{1}$	$\frac{9}{4}$	20
21	$\frac{2}{3} + \frac{4}{4} =$	$\frac{4}{2} + \frac{3}{4} =$	$\frac{4}{4} + \frac{3}{4} =$		$\frac{5}{3}$	$\frac{11}{4}$	$\frac{7}{4}$	21
22	$\frac{3}{5} + \frac{3}{4} =$	$\frac{4}{3} + \frac{4}{5} =$	$\frac{3}{5} + \frac{5}{5} =$		$\frac{27}{20}$	$\frac{32}{15}$	$\frac{8}{5}$	22
23	$\frac{4}{4} + \frac{5}{4} =$	$\frac{4}{4} + \frac{3}{3} =$	$\frac{3}{3} + \frac{3}{3} =$		$\frac{9}{4}$	$\frac{2}{1}$	$\frac{2}{1}$	23
24	$\frac{4}{3} + \frac{3}{4} =$	$\frac{3}{2} + \frac{3}{5} =$	$\frac{3}{4} + \frac{2}{3} =$		$\frac{25}{12}$	$\frac{21}{10}$	$\frac{17}{12}$	24
25	$\frac{5}{4} + \frac{5}{2} =$	$\frac{5}{3} + \frac{2}{3} =$	$\frac{4}{5} + \frac{4}{2} =$		$\frac{15}{4}$	$\frac{7}{3}$	$\frac{14}{5}$	25
26	$\frac{5}{2} + \frac{4}{2} =$	$\frac{4}{3} + \frac{3}{4} =$	$\frac{2}{5} + \frac{4}{2} =$		$\frac{9}{2}$	$\frac{25}{12}$	$\frac{12}{5}$	26
27	$\frac{5}{3} + \frac{3}{5} =$	$\frac{4}{5} + \frac{2}{3} =$	$\frac{2}{3} + \frac{5}{4} =$		$\frac{34}{15}$	$\frac{22}{15}$	$\frac{23}{12}$	27
28	$\frac{3}{5} + \frac{2}{3} =$	$\frac{5}{5} + \frac{4}{3} =$	$\frac{4}{3} + \frac{3}{5} =$		$\frac{19}{15}$	$\frac{7}{3}$	$\frac{29}{15}$	28
29	$\frac{3}{4} + \frac{2}{5} =$	$\frac{4}{3} + \frac{5}{3} =$	$\frac{5}{3} + \frac{3}{4} =$		$\frac{23}{20}$	$\frac{3}{1}$	$\frac{29}{12}$	29
30	$\frac{3}{4} + \frac{3}{5} =$	$\frac{3}{3} + \frac{4}{4} =$	$\frac{5}{3} + \frac{3}{2} =$		$\frac{27}{20}$	$\frac{2}{1}$	$\frac{19}{6}$	30
31	$\frac{5}{1} + \frac{1}{5} =$	$\frac{4}{2} + \frac{2}{3} =$	$\frac{3}{3} + \frac{5}{1} =$		$\frac{26}{15}$	$\frac{8}{3}$	$\frac{6}{1}$	31
32	$\frac{3}{5} + \frac{2}{4} =$	$\frac{5}{5} + \frac{5}{3} =$	$\frac{2}{1} + \frac{3}{5} =$		$\frac{11}{10}$	$\frac{8}{3}$	$\frac{13}{5}$	32
33	$\frac{3}{5} + \frac{2}{5} =$	$\frac{3}{4} + \frac{5}{3} =$	$\frac{5}{3} + \frac{3}{1} =$		$\frac{1}{1}$	$\frac{29}{12}$	$\frac{20}{3}$	33
34	$\frac{5}{4} + \frac{3}{5} =$	$\frac{3}{1} + \frac{5}{4} =$	$\frac{1}{3} + \frac{3}{2} =$		$\frac{37}{20}$	$\frac{17}{4}$	$\frac{11}{6}$	34

Module V niveau 3

Soustraction (sans support visuel)

Soustrais ces fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
1	$\frac{4}{3} - \frac{2}{4} =$	$\frac{4}{2} - \frac{5}{3} =$	$\frac{12}{4} - \frac{8}{16} =$		$\frac{5}{6}$	$\frac{1}{3}$	$\frac{5}{2}$	1
2	$\frac{4}{3} - \frac{3}{4} =$	$\frac{4}{2} - \frac{4}{3} =$	$\frac{17}{8} - \frac{10}{16} =$		$\frac{7}{12}$	$\frac{2}{3}$	$\frac{3}{2}$	2
3	$\frac{4}{2} - \frac{2}{4} =$	$\frac{4}{2} - \frac{3}{4} =$	$\frac{5}{4} - \frac{3}{10} =$		$\frac{3}{2}$	$\frac{5}{4}$	$\frac{19}{20}$	3
4	$\frac{4}{3} - \frac{3}{5} =$	$\frac{4}{3} - \frac{3}{4} =$	$\frac{20}{12} - \frac{4}{10} =$		$\frac{11}{15}$	$\frac{7}{12}$	$\frac{19}{15}$	4
5	$\frac{2}{3} - \frac{3}{5} =$	$\frac{5}{3} - \frac{2}{4} =$	$\frac{17}{14} - \frac{6}{7} =$		$\frac{1}{15}$	$\frac{7}{6}$	$\frac{5}{14}$	5
6	$\frac{4}{5} - \frac{2}{4} =$	$\frac{4}{3} - \frac{3}{5} =$	$\frac{9}{7} - \frac{13}{14} =$		$\frac{3}{10}$	$\frac{11}{15}$	$\frac{5}{14}$	6
7	$\frac{4}{2} - \frac{4}{3} =$	$\frac{4}{3} - \frac{3}{4} =$	$\frac{9}{12} - \frac{6}{15} =$		$\frac{2}{3}$	$\frac{7}{12}$	$\frac{7}{20}$	7
8	$\frac{4}{5} - \frac{2}{4} =$	$\frac{3}{4} - \frac{2}{3} =$	$\frac{6}{9} - \frac{2}{5} =$		$\frac{3}{10}$	$\frac{1}{12}$	$\frac{4}{15}$	8
9	$\frac{4}{2} - \frac{3}{4} =$	$\frac{3}{2} - \frac{5}{4} =$	$\frac{19}{11} - \frac{11}{10} =$		$\frac{5}{4}$	$\frac{1}{4}$	$\frac{69}{110}$	9
10	$\frac{5}{2} - \frac{3}{4} =$	$\frac{4}{3} - \frac{4}{5} =$	$\frac{11}{15} - \frac{3}{5} =$		$\frac{7}{4}$	$\frac{8}{15}$	$\frac{2}{15}$	10
11	$\frac{5}{4} - \frac{4}{5} =$	$\frac{5}{4} - \frac{3}{5} =$	$\frac{5}{2} - \frac{3}{6} =$		$\frac{9}{20}$	$\frac{13}{20}$	$\frac{2}{1}$	11
12	$\frac{4}{3} - \frac{3}{4} =$	$\frac{4}{2} - \frac{4}{3} =$	$\frac{19}{3} - \frac{19}{18} =$		$\frac{7}{12}$	$\frac{2}{3}$	$\frac{95}{18}$	12
13	$\frac{4}{2} - \frac{4}{5} =$	$\frac{5}{4} - \frac{3}{5} =$	$\frac{13}{6} - \frac{8}{12} =$		$\frac{6}{5}$	$\frac{13}{20}$	$\frac{3}{2}$	13
14	$\frac{3}{2} - \frac{3}{4} =$	$\frac{4}{2} - \frac{2}{3} =$	$\frac{14}{5} - \frac{4}{10} =$		$\frac{3}{4}$	$\frac{4}{3}$	$\frac{12}{5}$	14
15	$\frac{4}{3} - \frac{3}{4} =$	$\frac{4}{3} - \frac{3}{5} =$	$\frac{20}{6} - \frac{15}{18} =$		$\frac{7}{12}$	$\frac{11}{15}$	$\frac{45}{18}$	15
16	$\frac{9}{11} - \frac{10}{18} =$	$\frac{11}{18} - \frac{3}{8} =$	$\frac{9}{11} - \frac{3}{11} =$		$\frac{26}{99}$	$\frac{17}{72}$	$\frac{6}{11}$	16
17	$\frac{18}{13} - \frac{16}{18} =$	$\frac{14}{10} - \frac{10}{11} =$	$\frac{11}{22} - \frac{2}{11} =$		$\frac{58}{117}$	$\frac{27}{55}$	$\frac{7}{22}$	17

Module V niveau 3

Soustraction (sans support visuel)

Soustrais ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$\frac{7}{12} - \frac{8}{20} =$	$\frac{17}{13} - \frac{15}{12} =$	$\frac{12}{6} - \frac{5}{10} =$	$\frac{36}{5}$	$\frac{3}{52}$	$\frac{3}{2}$	18
19	$\frac{20}{16} - \frac{6}{14} =$	$\frac{6}{7} - \frac{2}{3} =$	$\frac{14}{4} - \frac{16}{13} =$	$\frac{23}{28}$	$\frac{4}{21}$	$\frac{59}{26}$	19
20	$\frac{16}{20} - \frac{5}{15} =$	$\frac{8}{11} - \frac{4}{9} =$	$\frac{17}{3} - \frac{5}{15} =$	$\frac{14}{3}$	$\frac{28}{99}$	$\frac{16}{3}$	20
21	$\frac{16}{4} - \frac{7}{3} =$	$\frac{12}{6} - \frac{5}{9} =$	$\frac{14}{3} - \frac{14}{5} =$	$\frac{5}{3}$	$\frac{13}{9}$	$\frac{28}{15}$	21
22	$\frac{10}{7} - \frac{8}{16} =$	$\frac{16}{8} - \frac{13}{15} =$	$\frac{10}{16} - \frac{6}{12} =$	$\frac{13}{14}$	$\frac{17}{15}$	$\frac{1}{8}$	22
23	$\frac{17}{11} - \frac{7}{5} =$	$\frac{11}{3} - \frac{17}{18} =$	$\frac{20}{10} - \frac{11}{9} =$	$\frac{8}{55}$	$\frac{49}{18}$	$\frac{7}{9}$	23
24	$\frac{7}{5} - \frac{14}{15} =$	$\frac{12}{3} - \frac{2}{11} =$	$\frac{16}{6} - \frac{16}{18} =$	$\frac{7}{15}$	$\frac{42}{11}$	$\frac{16}{9}$	24
25	$\frac{17}{6} - \frac{18}{12} =$	$\frac{19}{5} - \frac{2}{3} =$	$\frac{17}{12} - \frac{6}{12} =$	$\frac{4}{3}$	$\frac{47}{15}$	$\frac{11}{12}$	25
26	$\frac{7}{3} - \frac{7}{6} =$	$\frac{14}{9} - \frac{11}{18} =$	$\frac{7}{8} - \frac{12}{16} =$	$\frac{7}{6}$	$\frac{17}{18}$	$\frac{1}{8}$	26
27	$\frac{9}{3} - \frac{12}{6} =$	$\frac{19}{8} - \frac{20}{12} =$	$\frac{12}{2} - \frac{7}{12} =$	$\frac{1}{1}$	$\frac{17}{24}$	$\frac{65}{12}$	27
28	$\frac{18}{8} - \frac{17}{20} =$	$\frac{18}{14} - \frac{6}{28} =$	$\frac{13}{14} - \frac{4}{7} =$	$\frac{7}{5}$	$\frac{15}{14}$	$\frac{5}{14}$	28
29	$\frac{18}{16} - \frac{4}{10} =$	$\frac{7}{4} - \frac{4}{7} =$	$\frac{4}{5} - \frac{9}{18} =$	$\frac{29}{40}$	$\frac{33}{28}$	$\frac{3}{10}$	29
30	$\frac{13}{6} - \frac{3}{2} =$	$\frac{8}{2} - \frac{5}{9} =$	$\frac{13}{6} - \frac{17}{20} =$	$\frac{2}{3}$	$\frac{31}{9}$	$\frac{79}{60}$	30
31	$\frac{7}{8} - \frac{3}{4} =$	$\frac{11}{16} - \frac{3}{8} =$	$\frac{7}{8} - \frac{3}{4} =$	$\frac{1}{8}$	$\frac{9}{16}$	$\frac{1}{8}$	31
32	$\frac{5}{6} - \frac{1}{3} =$	$\frac{3}{4} - \frac{1}{2} =$	$\frac{5}{6} - \frac{1}{3} =$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{2}{9}$	32
33	$\frac{9}{10} - \frac{2}{5} =$	$\frac{7}{10} - \frac{1}{5} =$	$\frac{9}{10} - \frac{2}{5} =$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	33
34	$\frac{11}{12} - \frac{1}{4} =$	$\frac{4}{5} - \frac{2}{3} =$	$\frac{4}{5} - \frac{2}{3} =$	$\frac{7}{12}$	$\frac{2}{15}$	$\frac{2}{15}$	34



Addition / soustraction (nb négatifs)

Calcule ces additions/soustractions de fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
1	$\frac{3}{24} + \frac{6}{5} =$	$\frac{7}{23} - \frac{6}{6} =$	$\frac{16}{18} - \frac{7}{6} =$		$\frac{53}{40}$	$\frac{-16}{23}$	$\frac{-5}{18}$	1
2	$\frac{17}{21} + \frac{6}{9} =$	$\frac{14}{29} - \frac{2}{8} =$	$\frac{2}{28} + \frac{7}{7} =$		$\frac{31}{21}$	$\frac{27}{116}$	$\frac{15}{14}$	2
3	$\frac{3}{30} - \frac{5}{7} =$	$\frac{25}{28} + \frac{10}{2} =$	$\frac{23}{24} + \frac{1}{10} =$		$\frac{-43}{70}$	$\frac{165}{28}$	$\frac{127}{120}$	3
4	$\frac{3}{29} - \frac{9}{4} =$	$\frac{7}{19} - \frac{9}{4} =$	$\frac{30}{24} + \frac{3}{2} =$		$\frac{-249}{116}$	$\frac{-143}{76}$	$\frac{11}{4}$	4
5	$\frac{25}{30} + \frac{9}{2} =$	$\frac{29}{18} - \frac{10}{10} =$	$\frac{11}{6} - \frac{7}{3} =$		$\frac{16}{3}$	$\frac{11}{18}$	$\frac{-1}{2}$	5
6	$\frac{18}{10} + \frac{2}{7} =$	$\frac{22}{29} + \frac{4}{3} =$	$\frac{9}{4} + \frac{7}{5} =$		$\frac{73}{35}$	$\frac{182}{87}$	$\frac{73}{20}$	6
7	$\frac{13}{14} + \frac{7}{2} =$	$\frac{29}{29} + \frac{2}{6} =$	$\frac{18}{24} - \frac{2}{1} =$		$\frac{31}{7}$	$\frac{4}{3}$	$\frac{-5}{4}$	7
8	$\frac{5}{22} - \frac{5}{3} =$	$\frac{11}{18} - \frac{9}{7} =$	$\frac{12}{6} + \frac{8}{7} =$		$\frac{-95}{66}$	$\frac{-85}{126}$	$\frac{22}{7}$	8
9	$\frac{6}{8} + \frac{6}{5} =$	$\frac{21}{12} + \frac{7}{7} =$	$\frac{14}{22} - \frac{7}{2} =$		$\frac{39}{20}$	$\frac{33}{12}$	$\frac{-63}{22}$	9
10	$\frac{14}{13} - \frac{4}{2} =$	$\frac{16}{20} - \frac{9}{3} =$	$\frac{12}{9} - \frac{5}{1} =$		$\frac{-12}{13}$	$\frac{-11}{5}$	$\frac{-11}{3}$	10
11	$\frac{18}{29} + \frac{9}{10} =$	$\frac{18}{4} + \frac{10}{5} =$	$\frac{1}{18} - \frac{10}{9} =$		$\frac{441}{290}$	$\frac{13}{2}$	$\frac{-19}{18}$	11
12	$\frac{8}{4} - \frac{10}{9} =$	$\frac{11}{14} - \frac{7}{1} =$	$\frac{14}{21} - \frac{7}{5} =$		$\frac{8}{9}$	$\frac{-87}{14}$	$\frac{-11}{15}$	12
13	$\frac{20}{4} + \frac{10}{7} =$	$\frac{8}{13} + \frac{4}{6} =$	$\frac{16}{4} + \frac{6}{8} =$		$\frac{45}{7}$	$\frac{50}{39}$	$\frac{19}{4}$	13
14	$\frac{25}{7} + \frac{1}{10} =$	$\frac{20}{10} + \frac{2}{3} =$	$\frac{8}{11} + \frac{1}{8} =$		$\frac{257}{70}$	$\frac{8}{3}$	$\frac{75}{88}$	14
15	$\frac{19}{18} - \frac{4}{3} =$	$\frac{6}{20} + \frac{2}{4} =$	$\frac{18}{14} + \frac{1}{8} =$		$\frac{-5}{18}$	$\frac{4}{5}$	$\frac{79}{56}$	15
16	$\frac{16}{12} + \frac{8}{8} =$	$\frac{15}{14} - \frac{7}{7} =$	$\frac{13}{29} - \frac{8}{4} =$		$\frac{7}{3}$	$\frac{1}{14}$	$\frac{-45}{29}$	16
17	$\frac{2}{24} - \frac{11}{1} =$	$\frac{27}{8} + \frac{2}{5} =$	$\frac{4}{40} + \frac{7}{2} =$		$\frac{-131}{12}$	$\frac{151}{40}$	$\frac{18}{5}$	17



Addition / soustraction (nb négatifs)

Calcule ces additions/soustractions de fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
18	$\frac{26}{27} - \frac{10}{4} =$	$\frac{7}{20} + \frac{9}{4} =$	$\frac{13}{33} - \frac{26}{3} =$		$\frac{-83}{54}$	$\frac{13}{5}$	$\frac{-91}{11}$	18
19	$\frac{22}{15} - \frac{6}{6} =$	$\frac{25}{20} + \frac{1}{5} =$	$\frac{21}{20} + \frac{1}{5} =$		$\frac{7}{15}$	$\frac{29}{20}$	$\frac{5}{4}$	19
20	$\frac{16}{6} - \frac{2}{9} =$	$\frac{3}{30} - \frac{4}{5} =$	$\frac{25}{15} + \frac{6}{3} =$		$\frac{22}{9}$	$\frac{-7}{10}$	$\frac{11}{3}$	20
21	$\frac{30}{26} - \frac{11}{3} =$	$\frac{19}{22} - \frac{6}{10} =$	$\frac{17}{4} - \frac{13}{21} =$		$\frac{-98}{39}$	$\frac{29}{110}$	$\frac{305}{84}$	21
22	$\frac{11}{20} + \frac{4}{7} =$	$\frac{26}{28} - \frac{6}{2} =$	$\frac{15}{2} - \frac{9}{3} =$		$\frac{157}{140}$	$\frac{-29}{14}$	$\frac{9}{2} + \frac{8}{11}$	22
23	$\frac{16}{4} + \frac{8}{11} =$	$\frac{11}{30} - \frac{3}{9} =$	$\frac{14}{18} + \frac{15}{7} =$		$\frac{52}{11}$	$\frac{16}{4} + \frac{8}{11}$	$\frac{184}{63} + \frac{8}{11}$	23
24	$\frac{19}{22} + \frac{9}{7} =$	$\frac{15}{24} - \frac{4}{5} =$	$\frac{77}{77} - \frac{19}{24} =$		$\frac{331}{154}$	$\frac{-7}{40}$	$\frac{5}{24} + \frac{8}{11}$	24
25	$\frac{14}{19} - \frac{11}{2} =$	$\frac{5}{7} + \frac{4}{4} =$	$\frac{7}{15} + \frac{5}{6} =$		$\frac{-181}{38}$	$\frac{12}{7}$	$\frac{13}{10}$	25
26	$\frac{12}{14} + \frac{1}{4} =$	$\frac{5}{25} - \frac{7}{5} =$	$\frac{8}{7} + \frac{17}{4} =$		$\frac{31}{28}$	$\frac{-6}{5}$	$\frac{151}{28}$	26
27	$\frac{18}{11} - \frac{3}{5} =$	$\frac{26}{13} + \frac{2}{11} =$	$\frac{32}{6} - \frac{7}{3} =$		$\frac{57}{55}$	$\frac{24}{11}$	3	27
28	$\frac{4}{5} - \frac{5}{8} =$	$\frac{22}{6} - \frac{2}{1} =$	$\frac{5}{13} - \frac{4}{26} =$		$\frac{7}{40}$	$\frac{5}{3}$	$\frac{3}{13}$	28
29	$\frac{1}{24} + \frac{1}{11} =$	$\frac{24}{17} - \frac{8}{4} =$	$\frac{13}{8} + \frac{7}{5} =$		$\frac{35}{264}$	$\frac{-10}{17}$	$\frac{121}{40}$	29
30	$\frac{30}{26} + \frac{1}{7} =$	$\frac{30}{2} - \frac{8}{7} =$	$\frac{7}{9} - \frac{15}{12} =$		$\frac{118}{91}$	$\frac{97}{7}$	$\frac{-17}{36}$	30
31	$\frac{9}{4} + \frac{1}{3} =$	$\frac{2}{7} - \frac{5}{14} =$	$\frac{11}{12} + \frac{2}{3} =$		$\frac{31}{12}$	$-\frac{1}{14}$	$\frac{17}{12}$	31
32	$\frac{7}{9} - \frac{4}{5} =$	$\frac{1}{2} + \frac{2}{5} =$	$\frac{2}{5} - \frac{3}{7} =$		$-\frac{1}{45}$	$\frac{9}{10}$	$\frac{1}{35}$	32
33	$\frac{5}{6} + \frac{2}{9} =$	$\frac{3}{8} - \frac{1}{4} =$	$\frac{3}{4} + \frac{5}{6} =$		$\frac{19}{18}$	$\frac{1}{8}$	$\frac{19}{12}$	33
34	$\frac{1}{2} + \frac{2}{3} =$	$\frac{5}{9} - \frac{2}{3} =$	$\frac{7}{8} - \frac{3}{5} =$		$\frac{7}{6}$	$-\frac{1}{9}$	$\frac{11}{40}$	34

Module V, niveau 5

Addition / soustrait. de 3 fractions

Calcule ces additions/soustractions de fractions.



	colonne 1	colonne 2	col1	col2	
1	$\frac{-2}{7} - \frac{7}{5} =$	$\frac{-1}{9} - \frac{1}{9} - \frac{5}{10} =$	$\frac{-37}{35}$	$\frac{-13}{18}$	1
2	$\frac{-7}{7} + \frac{5}{9} + \frac{-5}{6} =$	$\frac{1}{9} + \frac{-3}{2} - \frac{3}{6} =$	$\frac{-23}{18}$	$\frac{-17}{9}$	2
3	$\frac{8}{9} - \frac{-4}{10} =$	$\frac{-2}{10} - \frac{4}{3} - \frac{1}{2} =$	$\frac{58}{45}$	$\frac{-61}{30}$	3
4	$\frac{1}{2} + \frac{-6}{5} - \frac{4}{3} =$	$\frac{-2}{3} + \frac{-9}{2} =$	$\frac{-61}{30}$	$\frac{-23}{6}$	4
5	$\frac{6}{15} + \frac{-10}{11} + \frac{7}{11} =$	$\frac{-6}{12} - \frac{-3}{10} - \frac{-10}{8} =$	$\frac{7}{55}$	$\frac{-23}{20}$	5
6	$\frac{2}{9} + \frac{7}{6} =$	$\frac{-24}{10} - \frac{2}{1} =$	$\frac{25}{18}$	$\frac{-22}{5}$	6
7	$\frac{-10}{25} + \frac{9}{3} - \frac{6}{4} =$	$\frac{-7}{9} + \frac{-1}{2} =$	$\frac{11}{10}$	$\frac{-23}{18}$	7
8	$\frac{13}{5} + \frac{8}{3} =$	$\frac{-9}{4} - \frac{-2}{3} - \frac{4}{3} =$	$\frac{79}{15}$	$\frac{-35}{12}$	8
9	$\frac{-25}{3} - \frac{4}{3} - \frac{-10}{10} =$	$\frac{-4}{9} + \frac{-3}{12} - \frac{-1}{3} =$	$\frac{-26}{3}$	$\frac{-5}{18}$	9
10	$\frac{2}{28} + \frac{-7}{5} - \frac{3}{5} =$	$\frac{-14}{31} + \frac{4}{8} - \frac{1}{2} =$	$\frac{-27}{14}$	$\frac{-14}{31}$	10
11	$\frac{9}{8} + \frac{9}{10} =$	$\frac{-6}{9} + \frac{6}{3} + \frac{-8}{6} =$	$\frac{99}{40}$	$\frac{-1}{3}$	11
12	$\frac{2}{8} + \frac{-4}{6} + \frac{-10}{9} =$	$\frac{1}{4} + \frac{9}{5} =$	$\frac{-23}{36}$	$\frac{41}{20}$	12
13	$\frac{-11}{2} - \frac{-7}{6} =$	$\frac{-8}{3} + \frac{-5}{2} =$	$\frac{-13}{3}$	$\frac{-31}{6}$	13
14	$\frac{-5}{6} + \frac{10}{3} =$	$\frac{23}{23} - \frac{8}{7} =$	$\frac{1}{6}$	$\frac{-1}{7}$	14
15	$\frac{6}{8} - \frac{10}{6} - \frac{7}{4} =$	$\frac{1}{3} + \frac{9}{5} =$	$\frac{-8}{3}$	$\frac{32}{15}$	15
16	$\frac{12}{21} + \frac{10}{5} + \frac{-8}{8} =$	$\frac{-12}{3} + \frac{-5}{2} + \frac{-5}{4} =$	$\frac{11}{7}$	$\frac{-17}{4}$	16
17	$\frac{-9}{3} + \frac{4}{11} =$	$\frac{21}{3} - \frac{9}{4} - \frac{1}{4} =$	$\frac{-29}{11}$	$\frac{9}{2}$	17

Module V, niveau 5

Addition / soustrait. de 3 fractions

Calcule ces additions/soustractions de fractions.



	colonne 1	colonne 2	col1	col2	
18	$\frac{-9}{4} + \frac{-9}{4} =$	$\frac{4}{28} - \frac{-8}{6} =$	$\frac{-9}{2}$	$\frac{31}{21}$	18
19	$\frac{-2}{9} + \frac{-6}{9} - \frac{-8}{5} =$	$\frac{-9}{3} + \frac{5}{6} - \frac{-3}{1} =$	0	$\frac{5}{6}$	19
20	$\frac{18}{6} - \frac{7}{4} =$	$\frac{-5}{10} - \frac{10}{6} - \frac{-4}{2} =$	$\frac{5}{4}$	$\frac{-1}{6}$	20
21	$\frac{-10}{25} + \frac{-9}{7} =$	$\frac{17}{20} + \frac{10}{5} - \frac{-4}{5} =$	$\frac{-59}{35}$	$\frac{73}{20}$	21
22	$\frac{9}{22} + \frac{5}{11} + \frac{10}{11} =$	$\frac{23}{27} + \frac{-2}{4} =$	$\frac{39}{22}$	$\frac{19}{54}$	22
23	$\frac{3}{2} - \frac{-7}{4} - \frac{10}{11} =$	$\frac{9}{24} + \frac{-6}{8} - \frac{-10}{10} =$	$\frac{103}{44}$	$\frac{5}{8}$	23
24	$\frac{-1}{3} + \frac{-7}{6} =$	$\frac{-24}{7} - \frac{-4}{8} - \frac{3}{2} =$	$\frac{-3}{2}$	$\frac{-31}{7}$	24
25	$\frac{-22}{2} + \frac{-4}{2} + \frac{6}{10} =$	$\frac{-8}{5} + \frac{3}{5} + \frac{5}{8} =$	$\frac{-62}{5}$	$\frac{-3}{8}$	25
26	$\frac{24}{25} - \frac{-2}{3} - \frac{8}{8} =$	$\frac{-17}{28} + \frac{9}{4} + \frac{8}{4} =$	$\frac{47}{75}$	$\frac{51}{14}$	26
27	$\frac{3}{4} - \frac{-10}{9} - \frac{-2}{7} =$	$\frac{12}{7} + \frac{4}{7} + \frac{3}{7} =$	$\frac{113}{42}$	$\frac{19}{7}$	27
28	$\frac{2}{1} + \frac{4}{5} - \frac{-4}{10} =$	$\frac{26}{8} + \frac{6}{28} - \frac{13}{4} =$	$\frac{12}{5}$	$\frac{3}{14}$	28
29	$\frac{9}{18} + \frac{9}{6} =$	$\frac{15}{3} + \frac{21}{4} + \frac{5}{10} =$	$\frac{2}{1}$	$\frac{43}{4}$	29
30	$\frac{-12}{2} - \frac{8}{3} - \frac{3}{7} =$	$\frac{3}{2} + \frac{4}{3} + \frac{6}{4} =$	$\frac{-50}{21}$	$\frac{13}{6}$	30
31	$\frac{5}{6} - \frac{1}{2} - \frac{2}{3} =$	$\frac{7}{8} - \frac{3}{5} + \frac{1}{2} =$	$\frac{11}{3}$	$\frac{69}{40}$	31
32	$\frac{4}{9} - \frac{1}{6} + \frac{5}{14} =$	$\frac{5}{6} - \frac{2}{3} - \frac{1}{4} =$	$\frac{19}{42}$	$\frac{1}{12}$	32
33	$\frac{2}{3} + \frac{4}{5} =$	$\frac{3}{4} + \frac{5}{6} - \frac{2}{3} =$	$\frac{19}{20}$	$\frac{5}{6}$	33
34	$\frac{-4}{5} - \frac{1}{3} - \frac{7}{10} =$	$\frac{2}{7} - \frac{3}{5} + \frac{4}{2} =$	$\frac{-79}{30}$	$\frac{9}{35}$	34

Module VI, niveau 1

Multiplication / division (avec support visuel)

Calcule ces divisions/multiplications appliquées a des fractions.



	division	indice 1	indice 2	solution	
1	$\frac{1}{2} : 2$			$\frac{1}{4}$	1
2	$\frac{2}{5} : 2$			$\frac{1}{5}$	2
3	$\frac{1}{2} : 3$			$\frac{1}{6}$	3
4	$\frac{2}{3} : 2$			$\frac{1}{3}$	4
5	$\frac{3}{4} : 2$			$\frac{3}{8}$	5
6	$\frac{1}{4} : 2$			$\frac{1}{8}$	6
7	$\frac{3}{4} : 3$			$\frac{1}{4}$	7
8	$\frac{3}{5} : 2$			$\frac{3}{10}$	8
9	$\frac{3}{5} : 3$			$\frac{1}{5}$	9
10	$\frac{1}{3} : 4$			$\frac{1}{12}$	10
11	$\frac{1}{3} \times 5$			$\frac{5}{3}$	11

Module VI, niveau 1

Multiplication / division (avec support visuel)

Calcule ces divisions/multiplications appliquées a des fractions.



	division	indice 1	indice 2	solution	
12	$\frac{4}{5} : 2$			$\frac{2}{5}$	12
13	$\frac{1}{2} : 2$			$\frac{1}{4}$	13
14	$\frac{6}{7} : 3$			$\frac{2}{7}$	14
15	$\frac{2}{7} \times 3$			$\frac{6}{7}$	15
16	$\frac{1}{4} \times 3$			$\frac{3}{4}$	16
17	$\frac{1}{6} : 2$			$\frac{1}{12}$	17
18	$\frac{2}{5} : 2$			$\frac{1}{5}$	18
19	$\frac{1}{5} \times 4$			$\frac{4}{5}$	19
20	$\frac{1}{5} : 3$			$\frac{1}{15}$	20
21	$\frac{3}{5} : 3$			$\frac{1}{5}$	21
22	$\frac{6}{5} : 3$			$\frac{2}{5}$	22

Module VI, niveau 1

Multiplication / division (avec support visuel)

Calcule ces divisions/multiplications appliquées a des fractions.



	division	indice 1	indice 2	solution	
23	$\frac{1}{5} \times 4$			$\frac{4}{5}$	23
24	$\frac{1}{7} : 2$			$\frac{1}{14}$	24
25	$\frac{6}{7} : 3$			$\frac{2}{7}$	25
26	$\frac{1}{6} \times 2$			$\frac{2}{6} = \frac{1}{3}$	26
27	$\frac{3}{5} \times 2$			$\frac{6}{5}$	27
28	$\frac{4}{8} \times 2$			$\frac{8}{8} = 1$	28
29	$\frac{5}{5} : 2$			$\frac{5}{10} = \frac{1}{2}$	29
30	$\frac{1}{5} \times 5$			$\frac{5}{5} = 1$	30
31	$\frac{3}{7} \times 3$			$\frac{9}{7}$	31
32	$\frac{6}{6} : 4$			$\frac{1}{4}$	32
33	$\frac{3}{5} : 6$			$\frac{1}{10}$	33
34	$\frac{1}{2} \times 2$			$\frac{2}{2} = 1$	34

Module VI, niveau 1

Multiplication / division (avec support visuel)

Calcule ces divisions/multiplications appliquées a des fractions.



	division	indice 1	indice 2	solution	
35	$\frac{2}{5} : 2$			$\frac{1}{5}$	35
36	$\frac{1}{2} : 3$			$\frac{1}{6}$	36
37	$\frac{3}{4} : 2$			$\frac{3}{8}$	37
38	$\frac{3}{5} : 2$			$\frac{3}{10}$	38
39	$\frac{1}{3} : 4$			$\frac{1}{12}$	39
40	$\frac{6}{7} : 3$			$\frac{2}{7}$	40
41	$\frac{1}{4} \times 3$			$\frac{3}{4}$	41
42	$\frac{6}{5} : 3$			$\frac{2}{5}$	42
43	$\frac{6}{7} : 3$			$\frac{2}{7}$	43
44	$\frac{1}{6} \times 2$			$\frac{2}{6} = \frac{1}{3}$	44
45	$\frac{3}{5} \times 2$			$\frac{6}{5}$	45

Module VI, niveau 1

Multiplication / division (avec support visuel)

Calcule ces divisions/multiplications appliquées a des fractions.



	division	indice 1	indice 2	solution	
46	$\frac{6}{6} : 4$			$\frac{3}{12} = \frac{1}{4}$	46
47	$\frac{3}{5} : 6$			$\frac{1}{10}$	47
48	$\frac{6}{9} : 3$			$\frac{2}{9}$	48
49	$\frac{1}{9} \times 2$			$\frac{2}{9}$	49
50	$\frac{7}{9} \times 2$			$\frac{14}{9}$	50
51	$\frac{1}{2} \text{ de } \frac{1}{4}$			$\frac{1}{8}$	51
52	$\frac{1}{2} \text{ de } \frac{1}{3}$			$\frac{1}{6}$	52
53	$\frac{1}{2} \text{ de } \frac{1}{5}$			$\frac{1}{10}$	53
54	$\frac{1}{4} \text{ de } \frac{1}{2}$			$\frac{1}{8}$	54
55	$\frac{1}{2} \text{ de } \frac{1}{2}$			$\frac{1}{4}$	55

Module VI, niveau 2

Multiplication (sans support visuel)

Multiplie ces fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
1	$\frac{3}{6} \times \frac{4}{3} =$	$\frac{9}{2} \times \frac{6}{3} =$	$\frac{8}{4} \times \frac{3}{9} =$		$\frac{2}{3}$	$\frac{9}{1}$	$\frac{2}{3}$	1
2	$\frac{9}{5} \times \frac{6}{10} =$	$\frac{3}{9} \times \frac{5}{7} =$	$\frac{2}{8} \times \frac{8}{7} =$		$\frac{27}{25}$	$\frac{5}{21}$	$\frac{2}{7}$	2
3	$\frac{9}{7} \times \frac{8}{3} =$	$\frac{8}{6} \times \frac{8}{5} =$	$\frac{4}{8} \times \frac{4}{9} =$		$\frac{24}{7}$	$\frac{32}{15}$	$\frac{2}{9}$	3
4	$\frac{8}{10} \times \frac{7}{5} =$	$\frac{10}{4} \times \frac{6}{5} =$	$\frac{3}{9} \times \frac{10}{2} =$		$\frac{28}{25}$	$\frac{3}{1}$	$\frac{5}{3}$	4
5	$\frac{5}{9} \times \frac{2}{5} =$	$\frac{10}{9} \times \frac{7}{2} =$	$\frac{9}{8} \times \frac{5}{3} =$		$\frac{2}{9}$	$\frac{35}{9}$	$\frac{15}{8}$	5
6	$\frac{5}{7} \times \frac{6}{10} =$	$\frac{3}{6} \times \frac{5}{8} =$	$\frac{2}{9} \times \frac{4}{8} =$		$\frac{3}{7}$	$\frac{5}{16}$	$\frac{1}{9}$	6
7	$\frac{4}{10} \times \frac{4}{6} =$	$\frac{6}{3} \times \frac{4}{9} =$	$\frac{4}{3} \times \frac{2}{4} =$		$\frac{4}{15}$	$\frac{8}{9}$	$\frac{2}{3}$	7
8	$\frac{8}{4} \times \frac{10}{8} =$	$\frac{6}{8} \times \frac{4}{7} =$	$\frac{6}{3} \times \frac{5}{8} =$		$\frac{5}{2}$	$\frac{3}{7}$	$\frac{5}{4}$	8
9	$\frac{3}{7} \times \frac{7}{9} =$	$\frac{6}{5} \times \frac{3}{9} =$	$\frac{4}{10} \times \frac{8}{5} =$		$\frac{1}{3}$	$\frac{2}{5}$	$\frac{16}{25}$	9
10	$\frac{5}{4} \times \frac{4}{7} =$	$\frac{4}{7} \times \frac{7}{3} =$	$\frac{8}{3} \times \frac{7}{6} =$		$\frac{5}{7}$	$\frac{4}{3}$	$\frac{28}{9}$	10
11	$\frac{3}{5} \times \frac{4}{9} =$	$\frac{9}{6} \times \frac{9}{2} =$	$\frac{3}{5} \times \frac{7}{6} =$		$\frac{4}{15}$	$\frac{27}{4}$	$\frac{7}{10}$	11
12	$\frac{7}{6} \times \frac{8}{4} =$	$\frac{3}{5} \times \frac{2}{6} =$	$\frac{3}{9} \times \frac{4}{10} =$		$\frac{7}{3}$	$\frac{1}{5}$	$\frac{2}{15}$	12
13	$\frac{6}{7} \times \frac{7}{3} =$	$\frac{2}{9} \times \frac{3}{8} =$	$\frac{8}{7} \times \frac{9}{6} =$		$\frac{2}{1}$	$\frac{1}{12}$	$\frac{12}{7}$	13
14	$\frac{5}{9} \times \frac{4}{2} =$	$\frac{6}{8} \times \frac{10}{9} =$	$\frac{3}{10} \times \frac{6}{9} =$		$\frac{10}{9}$	$\frac{5}{6}$	$\frac{1}{5}$	14
15	$\frac{8}{4} \times \frac{9}{10} =$	$\frac{9}{2} \times \frac{2}{5} =$	$\frac{6}{4} \times \frac{10}{2} =$		$\frac{9}{5}$	$\frac{9}{5}$	$\frac{15}{2}$	15
16	$\frac{4}{10} \times \frac{9}{5} =$	$\frac{7}{8} \times \frac{10}{4} =$	$\frac{5}{7} \times \frac{6}{2} =$		$\frac{18}{25}$	$\frac{35}{16}$	$\frac{15}{7}$	16
17	$\frac{7}{3} \times \frac{3}{8} =$	$\frac{7}{3} \times \frac{2}{4} =$	$\frac{10}{4} \times \frac{5}{9} =$		$\frac{7}{8}$	$\frac{7}{6}$	$\frac{25}{18}$	17

Module VI, niveau 2

Multiplication (sans support visuel)

Multiplie ces fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
18	$\frac{4}{6} \times \frac{10}{5} =$	$\frac{3}{9} \times \frac{5}{4} =$	$\frac{6}{4} \times \frac{7}{5} =$		$\frac{4}{3}$	$\frac{5}{12}$	$\frac{21}{10}$	18
19	$\frac{5}{8} \times \frac{6}{5} =$	$\frac{3}{8} \times \frac{3}{6} =$	$\frac{5}{8} \times \frac{2}{9} =$		$\frac{3}{4}$	$\frac{3}{16}$	$\frac{5}{36}$	19
20	$\frac{9}{2} \times \frac{10}{3} =$	$\frac{7}{4} \times \frac{8}{7} =$	$\frac{9}{3} \times \frac{2}{4} =$		$\frac{15}{1}$	$\frac{2}{1}$	$\frac{3}{2}$	20
21	$\frac{6}{10} \times \frac{3}{7} =$	$\frac{4}{10} \times \frac{6}{8} =$	$\frac{3}{9} \times \frac{6}{7} =$		$\frac{9}{35}$	$\frac{3}{10}$	$\frac{2}{7}$	21
22	$\frac{9}{7} \times \frac{2}{9} =$	$\frac{4}{5} \times \frac{10}{6} =$	$\frac{5}{3} \times \frac{6}{10} =$		$\frac{2}{7}$	$\frac{4}{3}$	$\frac{1}{1}$	22
23	$\frac{5}{10} \times \frac{8}{3} =$	$\frac{7}{3} \times \frac{8}{7} =$	$\frac{3}{8} \times \frac{7}{6} =$		$\frac{4}{3}$	$\frac{8}{3}$	$\frac{7}{16}$	23
24	$\frac{3}{6} \times \frac{8}{4} =$	$\frac{4}{7} \times \frac{7}{10} =$	$\frac{9}{4} \times \frac{4}{3} =$		$\frac{1}{1}$	$\frac{2}{5}$	$\frac{3}{1}$	24
25	$\frac{4}{8} \times \frac{9}{6} =$	$\frac{9}{3} \times \frac{5}{9} =$	$\frac{5}{7} \times \frac{7}{3} =$		$\frac{3}{4}$	$\frac{5}{3}$	$\frac{5}{3}$	25
26	$\frac{4}{9} \times \frac{9}{8} =$	$\frac{3}{8} \times \frac{6}{9} =$	$\frac{3}{9} \times \frac{5}{2} =$		$\frac{1}{2}$	$\frac{1}{4}$	$\frac{5}{6}$	26
27	$\frac{9}{6} \times \frac{3}{8} =$	$\frac{4}{7} \times \frac{8}{2} =$	$\frac{7}{2} \times \frac{10}{8} =$		$\frac{9}{16}$	$\frac{16}{7}$	$\frac{35}{8}$	27
28	$\frac{8}{3} \times \frac{3}{10} =$	$\frac{9}{10} \times \frac{6}{9} =$	$\frac{10}{6} \times \frac{6}{5} =$		$\frac{4}{5}$	$\frac{3}{5}$	$\frac{2}{1}$	28
29	$\frac{10}{6} \times \frac{6}{8} =$	$\frac{5}{3} \times \frac{4}{8} =$	$\frac{9}{5} \times \frac{10}{6} =$		$\frac{5}{4}$	$\frac{5}{6}$	$\frac{3}{1}$	29
30	$\frac{7}{8} \times \frac{2}{5} =$	$\frac{3}{8} \times \frac{5}{3} =$	$\frac{6}{7} \times \frac{4}{10} =$		$\frac{7}{20}$	$\frac{5}{8}$	$\frac{12}{35}$	30
31	$\frac{4}{3} \times \frac{1}{4} =$	$\frac{5}{4} \times \frac{2}{3} =$	$\frac{2}{3} \times \frac{4}{5} =$		$\frac{1}{3}$	$\frac{5}{12}$	$\frac{8}{15}$	31
32	$\frac{2}{3} \times \frac{1}{5} =$	$\frac{7}{6} \times \frac{1}{2} =$	$\frac{8}{15} \times \frac{15}{16} =$		$\frac{2}{15}$	$\frac{7}{12}$	$\frac{2}{3}$	32
33	$\frac{6}{5} \times \frac{5}{12} =$	$\frac{5}{8} \times \frac{3}{4} =$	$\frac{7}{12} \times \frac{3}{5} =$		$\frac{1}{2}$	$\frac{15}{32}$	$\frac{7}{20}$	33
34	$\frac{3}{2} \times \frac{1}{4} =$	$\frac{3}{10} \times \frac{10}{9} =$	$\frac{9}{4} \times \frac{1}{3} =$		$\frac{3}{8}$	$\frac{1}{3}$	$\frac{3}{4}$	34

Module VI, niveau 3

Division (sans support visuel)

Divise ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{3}{4} \div \frac{3}{4} =$	$\frac{4}{3} \div \frac{4}{3} =$	$\frac{4}{3} \div \frac{2}{4} =$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{8}{3}$	1
2	$\frac{4}{2} \div \frac{3}{5} =$	$\frac{3}{2} \div \frac{3}{5} =$	$\frac{4}{2} \div \frac{5}{4} =$	$\frac{10}{3}$	$\frac{5}{2}$	$\frac{8}{5}$	2
3	$\frac{4}{2} \div \frac{2}{5} =$	$\frac{3}{2} \div \frac{5}{2} =$	$\frac{4}{3} \div \frac{4}{3} =$	$\frac{5}{1}$	$\frac{3}{5}$	$\frac{1}{1}$	3
4	$\frac{5}{2} \div \frac{5}{3} =$	$\frac{2}{3} \div \frac{5}{3} =$	$\frac{2}{3} \div \frac{4}{3} =$	$\frac{3}{2}$	$\frac{2}{5}$	$\frac{1}{2}$	4
5	$\frac{3}{4} \div \frac{3}{2} =$	$\frac{5}{2} \div \frac{2}{4} =$	$\frac{4}{2} \div \frac{2}{4} =$	$\frac{1}{2}$	$\frac{5}{1}$	$\frac{4}{1}$	5
6	$\frac{5}{2} \div \frac{5}{4} =$	$\frac{4}{3} \div \frac{5}{3} =$	$\frac{2}{4} \div \frac{4}{3} =$	$\frac{2}{1}$	$\frac{4}{5}$	$\frac{3}{8}$	6
7	$\frac{5}{3} \div \frac{5}{3} =$	$\frac{3}{5} \div \frac{2}{4} =$	$\frac{4}{3} \div \frac{4}{3} =$	$\frac{1}{1}$	$\frac{6}{5}$	$\frac{1}{1}$	7
8	$\frac{3}{4} \div \frac{4}{2} =$	$\frac{4}{2} \div \frac{2}{5} =$	$\frac{2}{4} \div \frac{4}{5} =$	$\frac{3}{8}$	$\frac{5}{1}$	$\frac{5}{8}$	8
9	$\frac{3}{2} \div \frac{2}{4} =$	$\frac{4}{3} \div \frac{2}{3} =$	$\frac{3}{4} \div \frac{3}{5} =$	$\frac{3}{1}$	$\frac{2}{1}$	$\frac{5}{4}$	9
10	$\frac{4}{3} \div \frac{4}{3} =$	$\frac{4}{2} \div \frac{4}{3} =$	$\frac{3}{5} \div \frac{3}{5} =$	$\frac{1}{1}$	$\frac{3}{2}$	$\frac{1}{1}$	10
11	$\frac{3}{2} \div \frac{5}{2} =$	$\frac{4}{2} \div \frac{4}{2} =$	$\frac{2}{5} \div \frac{2}{4} =$	$\frac{3}{5}$	$\frac{1}{1}$	$\frac{4}{5}$	11
12	$\frac{3}{4} \div \frac{3}{5} =$	$\frac{3}{4} \div \frac{2}{4} =$	$\frac{2}{3} \div \frac{4}{3} =$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{1}{2}$	12
13	$\frac{4}{3} \div \frac{4}{2} =$	$\frac{2}{3} \div \frac{4}{3} =$	$\frac{5}{4} \div \frac{2}{4} =$	$\frac{2}{3}$	$\frac{1}{2}$	$\frac{5}{2}$	13
14	$\frac{2}{4} \div \frac{3}{2} =$	$\frac{3}{5} \div \frac{3}{5} =$	$\frac{4}{3} \div \frac{2}{4} =$	$\frac{1}{3}$	$\frac{1}{1}$	$\frac{8}{3}$	14
15	$\frac{5}{4} \div \frac{5}{3} =$	$\frac{5}{3} \div \frac{5}{4} =$	$\frac{2}{3} \div \frac{4}{2} =$	$\frac{3}{4}$	$\frac{4}{3}$	$\frac{1}{3}$	15
16	$\frac{3}{5} \div \frac{3}{2} =$	$\frac{2}{4} \div \frac{3}{2} =$	$\frac{2}{3} \div \frac{2}{5} =$	$\frac{2}{5}$	$\frac{1}{3}$	$\frac{5}{3}$	16
17	$\frac{2}{4} \div \frac{4}{3} =$	$\frac{4}{2} \div \frac{3}{2} =$	$\frac{4}{2} \div \frac{4}{3} =$	$\frac{3}{8}$	$\frac{4}{3}$	$\frac{3}{2}$	17

Module VI, niveau 3

Division (sans support visuel)

Divise ces fractions.



	colonne 1	colonne 2	colonne 3		col1	col2	col3	
18	$\frac{4}{2} \div \frac{3}{2} =$	$\frac{4}{2} \div \frac{5}{4} =$	$\frac{2}{4} \div \frac{2}{4} =$		$\frac{4}{3}$	$\frac{8}{5}$	$\frac{1}{1}$	18
19	$\frac{4}{2} \div \frac{4}{5} =$	$\frac{4}{3} \div \frac{4}{2} =$	$\frac{5}{3} \div \frac{4}{2} =$		$\frac{5}{2}$	$\frac{2}{3}$	$\frac{5}{6}$	19
20	$\frac{5}{4} \div \frac{5}{3} =$	$\frac{5}{2} \div \frac{5}{4} =$	$\frac{4}{2} \div \frac{5}{4} =$		$\frac{3}{4}$	$\frac{2}{1}$	$\frac{8}{5}$	20
21	$\frac{4}{3} \div \frac{2}{3} =$	$\frac{4}{3} \div \frac{4}{3} =$	$\frac{4}{3} \div \frac{5}{3} =$		$\frac{2}{1}$	$\frac{1}{1}$	$\frac{4}{5}$	21
22	$\frac{4}{5} \div \frac{2}{4} =$	$\frac{3}{4} \div \frac{2}{4} =$	$\frac{4}{2} \div \frac{5}{3} =$		$\frac{8}{5}$	$\frac{3}{2}$	$\frac{6}{5}$	22
23	$\frac{5}{4} \div \frac{5}{2} =$	$\frac{3}{4} \div \frac{3}{5} =$	$\frac{4}{2} \div \frac{4}{5} =$		$\frac{1}{2}$	$\frac{5}{4}$	$\frac{5}{2}$	23
24	$\frac{4}{2} \div \frac{2}{5} =$	$\frac{4}{5} \div \frac{3}{5} =$	$\frac{4}{3} \div \frac{4}{3} =$		$\frac{5}{1}$	$\frac{4}{3}$	$\frac{1}{1}$	24
25	$\frac{5}{4} \div \frac{3}{4} =$	$\frac{5}{4} \div \frac{5}{4} =$	$\frac{3}{4} \div \frac{3}{4} =$		$\frac{5}{3}$	$\frac{1}{1}$	$\frac{1}{1}$	25
26	$\frac{4}{2} \div \frac{5}{2} =$	$\frac{4}{3} \div \frac{5}{3} =$	$\frac{4}{2} \div \frac{2}{5} =$		$\frac{4}{5}$	$\frac{4}{5}$	$\frac{5}{1}$	26
27	$\frac{4}{3} \div \frac{4}{2} =$	$\frac{4}{2} \div \frac{4}{3} =$	$\frac{5}{4} \div \frac{2}{4} =$		$\frac{2}{3}$	$\frac{3}{2}$	$\frac{5}{2}$	27
28	$\frac{5}{4} \div \frac{3}{4} =$	$\frac{5}{3} \div \frac{4}{2} =$	$\frac{2}{5} \div \frac{4}{5} =$		$\frac{5}{3}$	$\frac{5}{6}$	$\frac{1}{2}$	28
29	$\frac{3}{4} \div \frac{3}{5} =$	$\frac{2}{4} \div \frac{5}{4} =$	$\frac{4}{3} \div \frac{4}{2} =$		$\frac{5}{4}$	$\frac{2}{5}$	$\frac{2}{3}$	29
30	$\frac{2}{5} \div \frac{4}{3} =$	$\frac{4}{2} \div \frac{2}{4} =$	$\frac{2}{4} \div \frac{2}{3} =$		$\frac{3}{10}$	$\frac{4}{1}$	$\frac{3}{4}$	30
31	$\frac{6}{4} \div \frac{3}{2} =$	$\frac{9}{8} \div \frac{3}{5} =$	$\frac{4}{9} \div \frac{3}{4} =$		2	$\frac{15}{8}$	$\frac{16}{27}$	31
32	$\frac{8}{6} \div \frac{2}{3} =$	$\frac{2}{7} \div \frac{5}{9} =$	$\frac{3}{8} \div \frac{4}{7} =$		$\frac{5}{2}$	$\frac{18}{35}$	$\frac{21}{32}$	32
33	$\frac{7}{5} \div \frac{5}{7} =$	$\frac{5}{6} \div \frac{4}{5} =$	$\frac{7}{12} \div \frac{5}{6} =$		$\frac{49}{25}$	$\frac{5}{6}$	$\frac{7}{10}$	33
34	$\frac{1}{2} \div \frac{2}{3} =$	$\frac{2}{3} \div \frac{3}{8} =$	$\frac{1}{5} \div \frac{5}{6} =$		$\frac{3}{4}$	$\frac{16}{9}$	$\frac{2}{25}$	34

Multiplication (nombres négatifs)

Multiplie ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{-26}{49} \cdot \frac{-7}{13} =$	$\frac{-36}{24} \cdot \frac{-11}{3} =$	$\frac{56}{72} \cdot \frac{9}{14} =$	$\frac{2}{7}$	$\frac{-11}{2}$	$\frac{1}{2}$	1
2	$\frac{-7}{5} \cdot \frac{4}{12} =$	$\frac{50}{6} \cdot \frac{6}{15} =$	$\frac{-5}{220} \cdot \frac{-220}{15} =$	$\frac{-7}{15}$	$\frac{10}{3}$	$\frac{1}{3}$	2
3	$\frac{-9}{10} \cdot \frac{5}{3} =$	$\frac{3}{308} \cdot \frac{-308}{13} =$	$10 \cdot \frac{14}{3} =$	$\frac{-3}{2}$	$\frac{-3}{13}$	$\frac{140}{3}$	3
4	$\frac{6}{-8} \cdot \frac{-4}{30} =$	$4 \cdot \frac{-10}{2} =$	$-2 \cdot \frac{4}{10} =$	$\frac{1}{10}$	-20	$\frac{-4}{5}$	4
5	$\frac{-2}{4} \cdot \frac{19}{6} =$	$\frac{-5}{30} \cdot \frac{-3}{5} =$	$\frac{6}{110} \cdot \frac{11}{9} =$	$\frac{-19}{12}$	$\frac{1}{10}$	$\frac{1}{15}$	5
6	$\frac{-3}{7} \cdot \frac{2}{15} =$	$\frac{-2}{30} \cdot \frac{-5}{2} =$	$7 \cdot \frac{-14}{12} =$	$\frac{-2}{35}$	$\frac{1}{6}$	$\frac{-49}{6}$	6
7	$\frac{130}{7} \cdot \frac{7}{80} =$	$\frac{32}{64} \cdot \frac{14}{5} =$	$2 \cdot \frac{-6}{16} =$	$\frac{13}{8}$	$\frac{7}{5}$	$\frac{-3}{8}$	7
8	$-2 \cdot \frac{15}{19} =$	$-14 \cdot \frac{3}{9} =$	$\frac{56}{15} \cdot \frac{11}{77} =$	$\frac{-30}{19}$	$\frac{-14}{3}$	$\frac{8}{15}$	8
9	$\frac{50}{60} \cdot \frac{-12}{11} =$	$\frac{-6}{30} \cdot \frac{4}{6} =$	$\frac{-2}{3} \cdot \frac{-3}{4} =$	$\frac{-10}{11}$	$\frac{-2}{15}$	$\frac{1}{2}$	9
10	$-5 \cdot \frac{-3}{15} =$	$15 \cdot \frac{-12}{3} =$	$\frac{30}{24} \cdot \frac{4}{5} =$	1	-4	1	10
11	$\frac{-8}{144} \cdot \frac{144}{12} =$	$\frac{4}{10} \cdot \frac{-14}{7} =$	$-3 \cdot \frac{-5}{18} =$	$\frac{-2}{3}$	$\frac{-4}{5}$	$\frac{5}{6}$	11
12	$\frac{-70}{35} \cdot \frac{7}{10} =$	$\frac{-6}{10} \cdot \frac{6}{22} =$	$\frac{36}{2} \cdot \frac{4}{-9} =$	$\frac{-14}{10}$	$\frac{-9}{55}$	-8	12
13	$\frac{-42}{4} \cdot \frac{-2}{7} =$	$\frac{-27}{5} \cdot \frac{-10}{5} =$	$\frac{-11}{18} \cdot \frac{8}{11} =$	3	$\frac{54}{5}$	$\frac{-4}{9}$	13
14	$\frac{-33}{-7} \cdot \frac{-14}{3} =$	$-4 \cdot \frac{-14}{6} =$	$\frac{-8}{36} \cdot \frac{-9}{2} =$	-22	$\frac{28}{3}$	1	14
15	$\frac{36}{4} \cdot \frac{-14}{9} =$	$\frac{-6}{38} \cdot \frac{2}{-4} =$	$-3 \cdot \frac{5}{-15} =$	-4	$\frac{3}{38}$	1	15
16	$\frac{-28}{14} \cdot \frac{-2}{5} =$	$\frac{-28}{15} \cdot \frac{15}{20} =$	$\frac{-8}{4} \cdot \frac{30}{32} =$	$\frac{4}{5}$	$\frac{-7}{5}$	$\frac{-15}{18}$	16
17	$5 \cdot \frac{3}{19} =$	$\frac{-56}{8} \cdot \frac{2}{-36} =$	$\frac{-12}{3} \cdot \frac{1}{10} =$	$\frac{15}{19}$	$\frac{7}{18}$	$\frac{-2}{5}$	17

Multiplication (nombres négatifs)

Multiplie ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$\frac{5}{40} \cdot \frac{-33}{33} =$	$\frac{-4}{5} \cdot \frac{-7}{12} =$	$\frac{35}{6} \cdot \frac{-12}{-20} =$	$\frac{-1}{8}$	$\frac{7}{15}$	$\frac{7}{2}$	18
19	$-7 \cdot \frac{21}{14} =$	$-3 \cdot \frac{2}{9} =$	$\frac{-40}{1} \cdot \frac{-4}{20} =$	$\frac{-21}{2}$	$\frac{-2}{3}$	8	19
20	$\frac{-8}{36} \cdot \frac{-9}{3} =$	$-2 \cdot \frac{8}{20} =$	$\frac{-32}{2} \cdot \frac{4}{-8} =$	$\frac{2}{3}$	$\frac{-4}{5}$	8	20
21	$-14 \cdot \frac{5}{7} =$	$\frac{-7}{4} \cdot \frac{-40}{8} =$	$\frac{-9}{5} \cdot \frac{1}{18} =$	-10	$\frac{35}{4}$	$\frac{-1}{10}$	21
22	$\frac{-4}{4} \cdot \frac{16}{3} =$	$\frac{9}{-36} \cdot \frac{-6}{4} =$	$\frac{-44}{5} \cdot \frac{2}{11} =$	$\frac{-16}{3}$	$\frac{3}{8}$	$\frac{-8}{5}$	22
23	$\frac{-10}{24} \cdot \frac{6}{3} =$	$\frac{-88}{3} \cdot \frac{-2}{99} =$	$\frac{-7}{-3} \cdot \frac{-4}{21} =$	$\frac{-5}{6}$	$\frac{16}{27}$	$\frac{-4}{9}$	23
24	$14 \cdot \frac{-7}{2} =$	$\frac{-10}{3} \cdot \frac{-9}{13} =$	$\frac{-4}{2} \cdot \frac{18}{6} =$	$\frac{-7}{2}$	$\frac{30}{13}$	-6	24
25	$\frac{48}{28} \cdot \frac{14}{12} =$	$\frac{-15}{4} \cdot \frac{5}{3} =$	$\frac{-4}{12} \cdot \frac{7}{2} =$	2	$\frac{-25}{4}$	$\frac{-7}{6}$	25
26	$\frac{4}{81} \cdot \frac{81}{8} =$	$\frac{2}{-71} \cdot \frac{7}{7} =$	$\frac{14}{8} \cdot \frac{-4}{7} =$	$\frac{1}{2}$	$\frac{2}{71}$	-1	26
27	$\frac{-11}{20} \cdot \frac{30}{3} =$	$-6 \cdot \frac{12}{13} =$	$3 \cdot \frac{-9}{21} =$	$\frac{-11}{2}$	$\frac{72}{13}$	$\frac{-3}{7}$	27
28	$\frac{-50}{8} \cdot \frac{-8}{80} =$	$-4 \cdot \frac{-3}{2} =$	$\frac{-9}{4} \cdot \frac{6}{45} =$	$\frac{5}{8}$	6	$\frac{-3}{10}$	28
29	$\frac{8}{63} \cdot \frac{-4}{-8} =$	$\frac{8}{-7} \cdot \frac{-21}{4} =$	$\frac{2}{3} \cdot \frac{-69}{19} =$	$\frac{4}{63}$	6	$\frac{-46}{19}$	29
30	$-9 \cdot \frac{-12}{15} =$	$-21 \cdot \frac{7}{3} =$	$\frac{12}{3} \cdot -9 =$	$\frac{36}{5}$	-49	-36	30
31	$-6 \cdot \frac{-8}{6} =$	$\frac{-36}{15} \cdot \frac{-10}{12} =$	$\frac{6}{-3} \cdot \frac{-9}{27} =$	8	2	$\frac{2}{3}$	31
32	$\frac{-10}{33} \cdot \frac{11}{8} =$	$\frac{30}{-45} \cdot \frac{-15}{2} =$	$\frac{1}{-3} \cdot \frac{1}{-6} =$	$\frac{-5}{12}$	5	$\frac{1}{18}$	32
33	$\frac{-54}{2} \cdot \frac{-6}{90} =$	$\frac{-5}{6} \cdot \frac{2}{-25} =$	$\frac{2}{-8} \cdot \frac{-3}{6} =$	$\frac{9}{5}$	$\frac{1}{15}$	$\frac{1}{18}$	33
34	$\frac{-5}{2} \cdot \frac{-6}{4} =$	$\frac{-1}{6} \cdot \frac{2}{-3} =$	$\frac{2}{-9} \cdot \frac{-3}{6} =$	$\frac{15}{4}$	$\frac{1}{9}$	$\frac{1}{9}$	34

Module VI niveau 5

Division (nombres négatifs)

Divise ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$-8 : \frac{15}{15} =$	$\frac{6}{4} : \frac{-7}{2} =$	$15 : \frac{-3}{10} =$	-8	$\frac{-3}{7}$	-50	1
2	$\frac{-8}{7} : \frac{56}{6} =$	$\frac{4}{12} : \frac{-1}{3} =$	$4 : \frac{-15}{10} =$	$\frac{-6}{49}$	-1	$\frac{-8}{3}$	2
3	$-2 : \frac{-1}{4} =$	$\frac{2}{6} : -5 =$	$-2 : \frac{-10}{3} =$	8	$\frac{-1}{15}$	$\frac{3}{5}$	3
4	$\frac{5}{9} : \frac{3}{8} =$	$-13 : \frac{4}{2} =$	$\frac{15}{10} : \frac{15}{10} =$	$\frac{40}{27}$	$\frac{-13}{2}$	1	4
5	$9 : \frac{-3}{5} =$	$-6 : \frac{11}{6} =$	$\frac{-1}{5} : \frac{-2}{5} =$	-15	$\frac{-30}{11}$	$\frac{1}{2}$	5
6	$\frac{12}{10} : \frac{3}{4} =$	$7 : \frac{-6}{4} =$	$15 : \frac{-15}{2} =$	$\frac{8}{5}$	$\frac{-14}{3}$	-2	6
7	$\frac{5}{3} : \frac{-5}{15} =$	$\frac{4}{3} : \frac{-3}{12} =$	$\frac{2}{5} : -11 =$	-5	$\frac{-16}{3}$	$\frac{-2}{55}$	7
8	$-6 : \frac{2}{5} =$	$\frac{-11}{5} : 2 =$	$\frac{-5}{6} : \frac{-9}{6} =$	-15	$\frac{-11}{10}$	$\frac{5}{9}$	8
9	$\frac{64}{64} : \frac{-3}{10} =$	$-2 : \frac{2}{9} =$	$\frac{-7}{8} : \frac{9}{8} =$	$\frac{-10}{3}$	-9	$\frac{-7}{9}$	9
10	$12 : \frac{-4}{3} =$	$\frac{-1}{3} : \frac{-8}{3} =$	$\frac{-18}{8} : -9 =$	-9	$\frac{1}{8}$	$\frac{1}{4}$	10
11	$11 : \frac{-20}{5} =$	$15 : \frac{-15}{2} =$	$\frac{1}{7} : \frac{-3}{28} =$	$\frac{-11}{4}$	-2	$\frac{-4}{3}$	11
12	$\frac{15}{10} : \frac{-12}{5} =$	$-2 : \frac{-5}{8} =$	$\frac{-2}{7} : 6 =$	$\frac{-5}{8}$	$\frac{16}{5}$	$\frac{-1}{21}$	12
13	$-12 : \frac{12}{4} =$	$\frac{-1}{2} : \frac{-1}{2} =$	$\frac{-5}{4} : -9 =$	-4	1	$\frac{5}{36}$	13
14	$\frac{-5}{4} : \frac{3}{15} =$	$\frac{1}{9} : \frac{-1}{7} =$	$\frac{5}{9} : -7 =$	$\frac{-25}{4}$	$\frac{-7}{9}$	$\frac{-5}{63}$	14
15	$4 : \frac{-1}{4} =$	$\frac{-2}{3} : \frac{5}{-9} =$	$\frac{4}{14} : -6 =$	-16	$\frac{6}{5}$	$\frac{-1}{21}$	15
16	$\frac{64}{32} : \frac{-2}{3} =$	$\frac{-5}{4} : \frac{-1}{5} =$	$-5 : \frac{8}{5} =$	-3	$\frac{25}{4}$	$\frac{-25}{8}$	16
17	$\frac{-1}{5} : \frac{8}{20} =$	$\frac{8}{3} : \frac{8}{5} =$	$\frac{7}{2} : \frac{-4}{12} =$	$\frac{-1}{2}$	$\frac{5}{3}$	$\frac{-21}{2}$	17

Module VI niveau 5

Division (nombres négatifs)

Divise ces fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$-6 : \frac{4}{20} =$	$-5 : \frac{-7}{10} =$	$5 : \frac{-11}{-55} =$	-30	$\frac{50}{7}$	25	18
19	$6 : \frac{-2}{6} =$	$10 : \frac{-3}{5} =$	$14 : \frac{-5}{2} =$	-18	$\frac{-50}{3}$	$\frac{-28}{5}$	19
20	$\frac{36}{12} : \frac{-2}{3} =$	$\frac{4}{5} : -5 =$	$-10 : \frac{-2}{3} =$	$\frac{-9}{2}$	$\frac{-4}{25}$	15	20
21	$-7 : \frac{-1}{4} =$	$-13 : \frac{13}{3} =$	$\frac{-12}{-14} : \frac{12}{14} =$	28	-3	1	21
22	$\frac{-14}{72} : \frac{-2}{12} =$	$-8 : \frac{56}{7} =$	$\frac{-1}{6} : \frac{-2}{6} =$	$\frac{7}{6}$	-1	$\frac{1}{2}$	22
23	$\frac{20}{16} : \frac{5}{6} =$	$7 : \frac{-36}{12} =$	$11 : \frac{2}{-11} =$	$\frac{3}{2}$	$\frac{-7}{3}$	$\frac{-121}{2}$	23
24	$\frac{-32}{11} : \frac{8}{-9} =$	$\frac{4}{3} : \frac{-4}{16} =$	$\frac{2}{5} : -2 =$	$\frac{36}{11}$	$\frac{-16}{3}$	$\frac{-1}{5}$	24
25	$-13 : \frac{13}{3} =$	$\frac{-13}{4} : 2 =$	$\frac{-2}{6} : \frac{-9}{4} =$	-3	$\frac{-13}{8}$	$\frac{4}{27}$	25
26	$\frac{-60}{15} : \frac{-60}{2} =$	$-36 : \frac{2}{9} =$	$\frac{-7}{4} : \frac{6}{4} =$	$\frac{2}{15}$	-16	$\frac{-7}{6}$	26
27	$-2 : \frac{7}{4} =$	$\frac{-2}{6} : \frac{-8}{6} =$	$\frac{-1}{8} : -4 =$	$\frac{-8}{7}$	$\frac{1}{4}$	$\frac{1}{32}$	27
28	$\frac{2}{5} : \frac{-2}{8} =$	$5 : \frac{-5}{5} =$	$\frac{1}{9} : \frac{-6}{27} =$	$\frac{-9}{8}$	-5	$\frac{-1}{2}$	28
29	$-3 : \frac{5}{9} =$	$-2 : \frac{-5}{9} =$	$\frac{-2}{6} : 6 =$	$\frac{-27}{5}$	$\frac{18}{5}$	$\frac{-1}{18}$	29
30	$\frac{-1}{8} : \frac{8}{64} =$	$\frac{-1}{3} : \frac{-1}{3} =$	$\frac{-5}{9} : -3 =$	-1	1	$\frac{-5}{9}$	30
31	$\frac{-4}{6} : \frac{-6}{8} =$	$\frac{1}{9} : \frac{-7}{3} =$	$\frac{7}{8} : -7 =$	$\frac{8}{9}$	$\frac{-1}{21}$	$\frac{-1}{8}$	31
32	$4 : \frac{-11}{2} =$	$\frac{-12}{3} : \frac{3}{-9} =$	$\frac{4}{13} : -6 =$	$\frac{-8}{11}$	12	$\frac{-2}{39}$	32
34	$\frac{-1}{56} : \frac{-1}{7} =$	$\frac{3}{6} : \frac{5}{6} =$	$\frac{7}{14} : \frac{-4}{2} =$	$\frac{1}{8}$	$\frac{3}{5}$	$\frac{-1}{4}$	34
35	$\frac{-1}{9} : \frac{-1}{2} =$	$\frac{3}{4} : \frac{10}{20} =$	$\frac{-2}{5} : \frac{-3}{6} =$	$\frac{2}{9}$	$\frac{3}{2}$	$\frac{1}{10}$	35

Module VII, niveau 1

Quatre opérations

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
1	$\frac{5}{2} + \frac{3}{4} =$	$\frac{2}{5} \div \frac{2}{4} =$	$\frac{3}{5} + \frac{4}{3} =$	$\frac{13}{4}$	$\frac{4}{5}$	$\frac{29}{15}$	1
2	$\frac{5}{4} - \frac{4}{5} =$	$\frac{5}{4} + \frac{2}{5} =$	$\frac{4}{3} - \frac{3}{4} =$	$\frac{9}{20}$	$\frac{33}{20}$	$\frac{7}{12}$	2
3	$\frac{4}{2} \times \frac{5}{3} =$	$\frac{4}{3} - \frac{2}{4} =$	$\frac{3}{4} \times \frac{4}{5} =$	$\frac{10}{3}$	$\frac{5}{6}$	$\frac{3}{5}$	3
4	$\frac{4}{3} \div \frac{4}{2} =$	$\frac{2}{4} \times \frac{2}{5} =$	$\frac{4}{2} \div \frac{2}{3} =$	$\frac{2}{3}$	$\frac{1}{5}$	$\frac{3}{1}$	4
5	$\frac{2}{3} + \frac{2}{4} =$	$\frac{2}{4} \div \frac{2}{3} =$	$\frac{2}{3} + \frac{2}{4} =$	$\frac{7}{6}$	$\frac{3}{4}$	$\frac{7}{6}$	5
6	$\frac{4}{2} - \frac{4}{3} =$	$\frac{4}{5} + \frac{2}{3} =$	$\frac{2}{3} - \frac{2}{4} =$	$\frac{2}{3}$	$\frac{22}{15}$	$\frac{1}{6}$	6
7	$\frac{5}{2} \times \frac{4}{3} =$	$\frac{3}{2} - \frac{4}{5} =$	$\frac{4}{3} \times \frac{3}{2} =$	$\frac{10}{3}$	$\frac{7}{10}$	$\frac{2}{1}$	7
8	$\frac{4}{5} \div \frac{4}{3} =$	$\frac{2}{4} \times \frac{4}{2} =$	$\frac{4}{3} \div \frac{2}{4} =$	$\frac{3}{5}$	$\frac{1}{1}$	$\frac{8}{3}$	8
9	$\frac{4}{2} + \frac{3}{4} =$	$\frac{4}{5} \div \frac{2}{3} =$	$\frac{4}{2} + \frac{4}{3} =$	$\frac{11}{4}$	$\frac{6}{5}$	$\frac{10}{3}$	9
10	$\frac{5}{3} - \frac{3}{4} =$	$\frac{4}{5} + \frac{2}{3} =$	$\frac{2}{3} - \frac{2}{5} =$	$\frac{11}{12}$	$\frac{22}{15}$	$\frac{4}{15}$	10
11	$\frac{5}{3} \times \frac{2}{5} =$	$\frac{5}{3} - \frac{3}{4} =$	$\frac{4}{3} \times \frac{3}{4} =$	$\frac{2}{3}$	$\frac{11}{12}$	$\frac{1}{1}$	11
12	$\frac{4}{5} \div \frac{2}{4} =$	$\frac{5}{3} \times \frac{3}{2} =$	$\frac{3}{4} \div \frac{3}{5} =$	$\frac{8}{5}$	$\frac{5}{2}$	$\frac{5}{4}$	12
13	$\frac{5}{3} + \frac{3}{4} =$	$\frac{5}{3} \div \frac{5}{2} =$	$\frac{3}{2} + \frac{3}{4} =$	$\frac{29}{12}$	$\frac{2}{3}$	$\frac{9}{4}$	13
14	$\frac{2}{3} + \frac{3}{5} =$	$\frac{3}{2} + \frac{5}{3} =$	$\frac{5}{4} - \frac{2}{3} =$	$\frac{19}{15}$	$\frac{19}{6}$	$\frac{7}{12}$	14
15	$\frac{4}{3} \times \frac{5}{2} =$	$\frac{4}{3} - \frac{3}{4} =$	$\frac{3}{4} \times \frac{2}{3} =$	$\frac{10}{3}$	$\frac{7}{12}$	$\frac{1}{2}$	15
16	$\frac{4}{3} \div \frac{2}{4} =$	$\frac{3}{4} + \frac{3}{2} =$	$\frac{2}{4} \div \frac{4}{3} =$	$\frac{8}{3}$	$\frac{9}{4}$	$\frac{3}{8}$	16
17	$\frac{2}{4} + \frac{5}{3} =$	$\frac{5}{2} - \frac{2}{4} =$	$\frac{4}{5} + \frac{5}{4} =$	$\frac{13}{6}$	$\frac{2}{1}$	$\frac{41}{20}$	17

Module VII, niveau 1

Quatre opérations

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
18	$\frac{4}{2} - \frac{4}{5} =$	$\frac{4}{2} \times \frac{4}{3} =$	$\frac{4}{2} - \frac{3}{4} =$	$\frac{6}{5}$	$\frac{8}{3}$	$\frac{5}{4}$	18
19	$\frac{2}{4} \times \frac{2}{3} =$	$\frac{3}{5} : \frac{3}{4} =$	$\frac{4}{2} \times \frac{2}{3} =$	$\frac{1}{3}$	$\frac{4}{5}$	$\frac{4}{3}$	19
20	$\frac{4}{3} : \frac{4}{5} =$	$\frac{2}{3} + \frac{4}{2} =$	$\frac{2}{4} : \frac{4}{3} =$	$\frac{5}{3}$	$\frac{8}{3}$	$\frac{3}{8}$	20
21	$\frac{4}{5} + \frac{4}{3} =$	$\frac{3}{4} - \frac{3}{5} =$	$\frac{2}{3} + \frac{5}{4} =$	$\frac{32}{15}$	$\frac{3}{20}$	$\frac{23}{12}$	21
22	$\frac{3}{2} - \frac{5}{4} =$	$\frac{4}{3} \times \frac{4}{2} =$	$\frac{5}{3} - \frac{2}{4} =$	$\frac{1}{4}$	$\frac{8}{3}$	$\frac{7}{6}$	22
23	$\frac{3}{5} \times \frac{4}{3} =$	$\frac{2}{4} : \frac{4}{3} =$	$\frac{3}{4} \times \frac{4}{3} =$	$\frac{4}{5}$	$\frac{3}{8}$	$\frac{1}{1}$	23
24	$\frac{3}{2} : \frac{2}{4} =$	$\frac{3}{4} + \frac{4}{3} =$	$\frac{5}{4} : \frac{4}{2} =$	$\frac{3}{1}$	$\frac{25}{12}$	$\frac{5}{8}$	24
25	$\frac{4}{5} + \frac{3}{4} =$	$\frac{4}{3} - \frac{2}{4} =$	$\frac{5}{3} + \frac{5}{4} =$	$\frac{31}{20}$	$\frac{5}{6}$	$\frac{35}{12}$	25
26	$\frac{5}{4} - \frac{2}{3} =$	$\frac{4}{5} \times \frac{4}{2} =$	$\frac{5}{4} - \frac{2}{3} =$	$\frac{7}{12}$	$\frac{8}{5}$	$\frac{7}{12}$	26
27	$\frac{4}{2} \times \frac{4}{3} =$	$\frac{3}{5} : \frac{3}{4} =$	$\frac{3}{4} \times \frac{4}{3} =$	$\frac{8}{3}$	$\frac{4}{5}$	$\frac{1}{1}$	27
28	$\frac{3}{5} : \frac{3}{2} =$	$\frac{4}{5} + \frac{3}{4} =$	$\frac{2}{3} : \frac{2}{4} =$	$\frac{2}{5}$	$\frac{31}{20}$	$\frac{4}{3}$	28
29	$\frac{3}{4} + \frac{4}{3} =$	$\frac{3}{2} - \frac{3}{4} =$	$\frac{2}{4} + \frac{3}{2} =$	$\frac{25}{12}$	$\frac{3}{4}$	$\frac{2}{1}$	29
30	$\frac{4}{3} - \frac{5}{4} =$	$\frac{4}{3} \times \frac{3}{5} =$	$\frac{4}{3} - \frac{3}{4} =$	$\frac{1}{12}$	$\frac{4}{5}$	$\frac{7}{12}$	30
31	$\frac{10}{6} + \frac{9}{7} =$	$\frac{10}{2} : \frac{5}{7} =$	$\frac{5}{7} + \frac{6}{4} =$	$\frac{62}{21}$	$\frac{7}{1}$	$\frac{31}{14}$	31
32	$\frac{6}{5} - \frac{7}{10} =$	$\frac{3}{10} + \frac{9}{3} =$	$\frac{5}{2} - \frac{2}{4} =$	$\frac{1}{2}$	$\frac{33}{10}$	$\frac{2}{1}$	32
33	$\frac{4}{5} \times \frac{3}{6} =$	$\frac{5}{2} - \frac{2}{9} =$	$\frac{9}{5} \times \frac{7}{3} =$	$\frac{2}{5}$	$\frac{41}{18}$	$\frac{21}{5}$	33
34	$\frac{9}{3} : \frac{5}{6} =$	$\frac{8}{6} \times \frac{4}{5} =$	$\frac{3}{7} : \frac{10}{6} =$	$\frac{18}{5}$	$\frac{16}{15}$	$\frac{9}{35}$	34

Module VII, niveau 1

Quatre opérations

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
35	$\frac{10}{8} + \frac{4}{5} =$	$\frac{8}{10} \div \frac{5}{8} =$	$\frac{4}{2} + \frac{9}{3} =$	$\frac{41}{20}$	$\frac{32}{25}$	$\frac{5}{1}$	35
36	$\frac{5}{2} - \frac{5}{9} =$	$\frac{6}{5} + \frac{8}{2} =$	$\frac{10}{8} - \frac{3}{4} =$	$\frac{35}{18}$	$\frac{26}{5}$	$\frac{1}{2}$	36
37	$\frac{10}{3} \times \frac{4}{6} =$	$\frac{6}{5} - \frac{3}{4} =$	$\frac{8}{10} \times \frac{10}{4} =$	$\frac{20}{9}$	$\frac{9}{20}$	$\frac{2}{1}$	37
38	$\frac{7}{9} \div \frac{4}{6} =$	$\frac{9}{8} \times \frac{6}{7} =$	$\frac{8}{7} \div \frac{9}{6} =$	$\frac{7}{6}$	$\frac{27}{28}$	$\frac{16}{21}$	38
39	$\frac{9}{4} + \frac{6}{9} =$	$\frac{6}{10} \div \frac{10}{7} =$	$\frac{4}{9} + \frac{10}{2} =$	$\frac{35}{12}$	$\frac{21}{50}$	$\frac{49}{9}$	39
40	$\frac{6}{3} - \frac{10}{9} =$	$\frac{5}{9} + \frac{2}{6} =$	$\frac{10}{2} - \frac{4}{3} =$	$\frac{8}{9}$	$\frac{8}{9}$	$\frac{11}{3}$	40
41	$\frac{4}{6} \times \frac{2}{10} =$	$\frac{7}{8} - \frac{3}{9} =$	$\frac{7}{6} \times \frac{2}{5} =$	$\frac{2}{15}$	$\frac{13}{24}$	$\frac{7}{15}$	41
42	$\frac{6}{10} \div \frac{4}{3} =$	$\frac{8}{9} \times \frac{2}{6} =$	$\frac{8}{6} \div \frac{2}{10} =$	$\frac{9}{20}$	$\frac{8}{27}$	$\frac{20}{3}$	42
43	$\frac{9}{10} + \frac{6}{8} =$	$\frac{4}{10} \div \frac{3}{4} =$	$\frac{8}{3} + \frac{5}{2} =$	$\frac{33}{20}$	$\frac{8}{15}$	$\frac{31}{6}$	43
44	$\frac{6}{2} - \frac{4}{10} =$	$\frac{8}{4} + \frac{9}{8} =$	$\frac{9}{3} - \frac{5}{9} =$	$\frac{13}{5}$	$\frac{25}{8}$	$\frac{22}{9}$	44
45	$\frac{9}{3} \times \frac{8}{5} =$	$\frac{10}{3} - \frac{10}{4} =$	$\frac{2}{6} \times \frac{4}{7} =$	$\frac{24}{5}$	$\frac{5}{6}$	$\frac{4}{21}$	45
46	$\frac{6}{2} \div \frac{7}{3} =$	$\frac{7}{8} + \frac{7}{2} =$	$\frac{3}{5} \div \frac{9}{8} =$	$\frac{9}{7}$	$\frac{35}{8}$	$\frac{8}{15}$	46
47	$\frac{4}{6} + \frac{4}{5} =$	$\frac{7}{8} - \frac{3}{6} =$	$\frac{7}{9} + \frac{7}{6} =$	$\frac{22}{15}$	$\frac{3}{8}$	$\frac{35}{18}$	47
48	$\frac{8}{7} - \frac{3}{10} =$	$\frac{6}{10} \times \frac{3}{4} =$	$\frac{10}{6} - \frac{2}{8} =$	$\frac{59}{70}$	$\frac{9}{20}$	$\frac{17}{12}$	48
49	$\frac{9}{10} \times \frac{8}{6} =$	$\frac{7}{6} \div \frac{4}{3} =$	$\frac{7}{9} \times \frac{3}{5} =$	$\frac{6}{5}$	$\frac{7}{8}$	$\frac{7}{15}$	49
50	$\frac{5}{4} \div \frac{9}{3} =$	$\frac{10}{6} + \frac{7}{3} =$	$\frac{4}{3} \div \frac{4}{7} =$	$\frac{5}{12}$	$\frac{4}{1}$	$\frac{7}{3}$	50
51	$\frac{6}{3} + \frac{7}{4} =$	$\frac{6}{5} - \frac{3}{6} =$	$\frac{9}{8} + \frac{6}{4} =$	$\frac{15}{4}$	$\frac{7}{10}$	$\frac{21}{8}$	51

Module VII, niveau 1

Quatre opérations

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	colonne 3	col1	col2	col3	
52	$\frac{5}{3} - \frac{3}{7} =$	$\frac{9}{7} \times \frac{7}{5} =$	$\frac{4}{6} - \frac{3}{8} =$	$\frac{26}{21}$	$\frac{9}{5}$	$\frac{7}{24}$	52
53	$\frac{3}{5} \times \frac{7}{9} =$	$\frac{3}{6} : \frac{7}{2} =$	$\frac{9}{3} \times \frac{5}{6} =$	$\frac{7}{15}$	$\frac{1}{7}$	$\frac{5}{2}$	53
54	$\frac{6}{5} : \frac{8}{6} =$	$\frac{6}{4} + \frac{2}{8} =$	$\frac{7}{5} : \frac{3}{9} =$	$\frac{9}{10}$	$\frac{7}{4}$	$\frac{21}{5}$	54
55	$\frac{3}{5} + \frac{3}{8} =$	$\frac{7}{10} - \frac{3}{9} =$	$\frac{7}{5} + \frac{8}{4} =$	$\frac{39}{40}$	$\frac{11}{30}$	$\frac{17}{5}$	55
56	$\frac{8}{3} - \frac{10}{5} =$	$\frac{8}{4} \times \frac{4}{7} =$	$\frac{3}{6} - \frac{4}{10} =$	$\frac{2}{3}$	$\frac{8}{7}$	$\frac{1}{10}$	56
57	$\frac{6}{8} \times \frac{4}{6} =$	$\frac{4}{5} : \frac{2}{8} =$	$\frac{3}{4} \times \frac{4}{3} =$	$\frac{1}{2}$	$\frac{16}{5}$	$\frac{1}{1}$	57
58	$\frac{8}{6} : \frac{3}{5} =$	$\frac{8}{4} + \frac{5}{7} =$	$\frac{7}{3} : \frac{8}{4} =$	$\frac{20}{9}$	$\frac{19}{7}$	$\frac{7}{6}$	58
59	$\frac{6}{2} + \frac{7}{5} =$	$\frac{4}{2} - \frac{7}{8} =$	$\frac{2}{10} + \frac{7}{9} =$	$\frac{22}{5}$	$\frac{9}{8}$	$\frac{44}{45}$	59
60	$\frac{9}{3} - \frac{9}{4} =$	$\frac{8}{5} \times \frac{6}{3} =$	$\frac{9}{7} - \frac{4}{8} =$	$\frac{3}{4}$	$\frac{16}{5}$	$\frac{11}{14}$	60
61	$\frac{9}{10} : \frac{4}{3} =$	$\frac{4}{3} : \frac{5}{6} =$	$\frac{3}{2} - \frac{1}{3} =$	$\frac{27}{40}$	$\frac{8}{5}$	$\frac{7}{6}$	61
62	$\frac{7}{10} + \frac{5}{8} =$	$\frac{2}{3} + \frac{3}{4} =$	$\frac{7}{8} : \frac{4}{5} =$	$\frac{41}{40}$	$\frac{11}{12}$	$\frac{35}{32}$	62
63	$\frac{17}{15} - \frac{10}{5} =$	$\frac{6}{5} - \frac{2}{3} =$	$\frac{1}{2} + \frac{3}{8} =$	$\frac{1}{15}$	$\frac{8}{15}$	$\frac{7}{8}$	63
64	$\frac{3}{4} \times \frac{2}{3} =$	$\frac{2}{5} + \frac{7}{6} =$	$\frac{7}{4} - \frac{3}{5} =$	$\frac{1}{2}$	$\frac{47}{30}$	$\frac{23}{20}$	64
65	$\frac{4}{3} : \frac{3}{5} =$	$\frac{1}{3} - \frac{5}{8} =$	$\frac{5}{6} \times \frac{4}{5} =$	$\frac{8}{5}$	$\frac{1}{24}$	$\frac{2}{3}$	65
66	$\frac{9}{2} + \frac{5}{4} =$	$\frac{5}{6} : \frac{4}{3} =$	$\frac{4}{7} : \frac{3}{5} =$	$\frac{49}{12}$	$\frac{5}{8}$	$\frac{20}{21}$	66
67	$\frac{8}{3} - \frac{6}{5} =$	$\frac{3}{4} \times \frac{5}{6} =$	$\frac{1}{2} + \frac{1}{4} =$	$\frac{37}{15}$	$\frac{5}{8}$	$\frac{3}{4}$	67

Module VII, niveau 2

Quatre opérations (nb négatifs)

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	col1	col2	
1	$\frac{-21}{5} - \frac{-6}{5} - \frac{1}{7} =$	$\frac{-2}{27} + \frac{4}{9} + \frac{9}{2} =$	$\frac{-22}{7}$	$\frac{263}{54}$	1
2	$\frac{100}{300} : \frac{2}{3} =$	$\frac{-21}{14} \cdot \frac{20}{-14} =$	$\frac{1}{2}$	$\frac{-15}{-7}$	2
3	$\frac{12}{14} \cdot \frac{-30}{-34} =$	$\frac{14}{147} : \frac{-5}{168} =$	$\frac{-90}{-119}$	$\frac{-16}{5}$	3
4	$\frac{26}{15} - \frac{9}{1} =$	$15 : \frac{13}{3} =$	$\frac{-109}{15}$	$\frac{45}{13}$	4
5	$\left(\frac{-7}{-1}\right) - 1 =$	$\frac{-60}{30} \cdot \frac{14}{54} =$	$\frac{1}{7}$	$\frac{-14}{27}$	5
6	$\frac{7}{3} + \frac{5}{2} =$	$\frac{-9}{8} + \frac{-7}{2} - \frac{-6}{3} =$	$\frac{29}{6}$	$\frac{-21}{8}$	6
7	$\frac{6}{16} - \frac{5}{3} =$	$\frac{20}{5} \cdot \frac{12}{60} =$	$\frac{-31}{24}$	$\frac{4}{5}$	7
8	$\frac{18}{5} : \frac{99}{5} =$	$\frac{-6}{\frac{5}{2}} =$	$\frac{2}{11}$	$\frac{-12}{5}$	8
9	$\frac{12}{9} : -16 =$	$\frac{-117}{156} : \frac{-13}{14} =$	$\frac{-1}{12}$	$\frac{21}{26}$	9
10	$\left(\frac{-10}{10}\right) 2 =$	$\frac{5}{15} + \frac{8}{8} - \frac{-1}{6} =$	1	$\frac{3}{2}$	10
11	$\frac{\frac{7}{9} - \frac{2}{8}}{\frac{9}{8}} =$	$\frac{20}{8} - \frac{2}{9} =$	$\frac{38}{81}$	$\frac{41}{18}$	11
12	$\left(\frac{-5}{7}\right) 2 =$	$\frac{-6}{14} : -17 =$	$\frac{25}{49}$	$\frac{3}{119}$	12
13	$\frac{4 - \frac{2}{2}}{\frac{6}{5}} =$	$\frac{-192}{3} : \frac{264}{15} =$	$\frac{5}{2}$	$\frac{-40}{11}$	13
14	$\frac{\frac{7}{9} + \frac{1}{8}}{1} =$	$\left(\frac{-5}{-1}\right) 3 =$	$\frac{65}{72}$	125	14
15	$\frac{-8}{39} : \frac{7}{33} =$	$\frac{165}{75} : \frac{8}{13} =$	$\frac{-88}{91}$	$\frac{143}{40}$	15
16	$\frac{1}{12} - \frac{8}{3} - \frac{-1}{8} =$	$\frac{15}{20} + \frac{5}{8} - \frac{-6}{6} =$	$\frac{-59}{24}$	$\frac{19}{8}$	16

Module VII, niveau 2

Quatre opérations (nb négatifs)

Effectue ces calculs sur les fractions.



	colonne 1	colonne 2	col1	col2	
17	$\frac{\frac{-2}{8} \cdot -1}{\frac{6}{9}} =$	$\frac{-18}{18} \cdot \frac{15}{30} =$	$\frac{3}{8}$	$\frac{-1}{2}$	17
18	$\left(\frac{7}{3}\right) \cdot 3 =$	$\frac{-16}{14} \cdot \frac{-6}{39} =$	$\frac{21}{3}$	$\frac{16}{91}$	18
19	$\frac{8}{30} - \frac{4}{10} =$	$\left(\frac{3}{7}\right)^{-1} =$	$\frac{-2}{15}$	$\frac{7}{3}$	19
20	$2 : \frac{4}{15} =$	$\frac{\frac{8}{2} - \frac{1}{4}}{\frac{6}{4}} =$	$\frac{15}{2}$	$\frac{5}{2}$	20
21	$\frac{8}{40} \cdot \frac{-32}{2} =$	$\frac{165}{12} : \frac{-90}{14} =$	$\frac{-16}{5}$	$\frac{-77}{36}$	21
22	$\frac{2}{(-4)^3} =$	$\frac{\frac{7}{3} - \frac{-1}{3}}{\frac{8}{8} - \frac{2}{5}} =$	$\frac{-1}{32}$	$\frac{40}{9}$	22
23	$\frac{-12}{-6} \cdot \frac{36}{12} =$	$\frac{(-10)^2}{(-6)^2} =$	$\frac{-6}{-1}$	$\frac{25}{9}$	23
24	$\frac{-11}{4} : -6 =$	$\frac{-2}{8} \cdot \frac{-3}{-4} =$	$\frac{11}{24}$	$\frac{-3}{-16}$	24
25	$\frac{10}{30} - \frac{8}{3} =$	$\frac{24}{32} \cdot \frac{12}{-1} =$	$\frac{-7}{3}$	$\frac{9}{-1}$	25
26	$\frac{1}{25} + \frac{3}{3} =$	$\frac{-9}{15} : 3 =$	$\frac{26}{25}$	$\frac{-1}{5}$	26
27	$\frac{\frac{4}{9} \cdot \frac{2}{6}}{\frac{3}{9} \cdot \frac{1}{2}} =$	$\frac{2}{12} \cdot \frac{2}{12} =$	$\frac{8}{9}$	$\frac{1}{36}$	27
28	$\frac{24}{22} + \frac{-9}{9} + \frac{4}{4} =$	$\frac{90}{10} : \frac{42}{2} =$	$\frac{12}{11}$	$\frac{3}{7}$	28
29	$\frac{\frac{4}{7} \cdot \frac{2}{3}}{\frac{1}{4} \cdot \frac{1}{3}} =$	$\frac{1}{3} \cdot \frac{2}{12} =$	$\frac{32}{7}$	$\frac{1}{18}$	30
30	$\frac{4}{2} + \frac{-3}{4} + \frac{1}{4} =$	$\frac{20}{10} : \frac{42}{2} =$	$\frac{3}{2}$	$\frac{2}{21}$	31