



# Colin and Coco's Daily Maths Workout

Workout 5.5

Answers

Fractions: Calculating



# Fractions: Calculating Workout

Workout A

$$\frac{1}{7} + \frac{2}{7} = \boxed{\frac{3}{7}}$$

$$\frac{1}{6} + \frac{4}{6} = \boxed{\frac{5}{6}}$$

$$\frac{3}{7} + \frac{2}{7} + \frac{1}{7} = \boxed{\frac{6}{7}}$$

$$\frac{2}{7} + \frac{3}{7} = \boxed{\frac{5}{7}}$$

$$\frac{3}{6} + \frac{5}{6} = \boxed{\frac{8}{6}}$$

$$\frac{1}{9} + \frac{4}{9} + \frac{3}{9} = \boxed{\frac{8}{9}}$$

$$\frac{4}{7} + \frac{5}{7} = \boxed{\frac{9}{7}}$$

$$\frac{3}{5} + \frac{3}{5} = \boxed{\frac{6}{5}}$$

$$\frac{3}{6} + \frac{3}{6} + \frac{1}{6} = \boxed{\frac{7}{6}}$$

$$\frac{4}{8} + \frac{5}{8} = \boxed{\frac{9}{8}}$$

$$\frac{6}{8} + \frac{2}{8} = \boxed{\frac{8}{8} = 1}$$

$$\frac{4}{5} + \frac{3}{5} + \frac{4}{5} = \boxed{\frac{11}{5}}$$

## Fractions: Calculating Workout

Workout B

$$\frac{4}{7} - \frac{1}{7} = \boxed{\frac{3}{7}}$$

$$\frac{9}{8} - \frac{5}{8} = \boxed{\frac{4}{8}}$$

$$\frac{8}{9} - \frac{3}{9} - \frac{1}{9} = \boxed{\frac{4}{9}}$$

$$\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$$

$$\frac{10}{8} - \frac{7}{8} = \boxed{\frac{3}{8}}$$

$$\frac{4}{7} - \frac{2}{7} - \frac{1}{7} = \boxed{\frac{1}{7}}$$

$$\frac{3}{4} - \frac{2}{4} = \boxed{\frac{1}{4}}$$

$$\frac{15}{6} - \frac{5}{6} = \boxed{\frac{10}{6}}$$

$$\frac{15}{8} - \frac{7}{8} - \frac{3}{8} = \boxed{\frac{5}{8}}$$

$$\frac{7}{8} - \frac{3}{8} = \boxed{\frac{4}{8}}$$

$$\frac{13}{9} - \frac{4}{9} = \boxed{\frac{9}{9} = 1}$$

$$\frac{18}{9} - \frac{8}{9} - \frac{1}{9} = \boxed{\frac{9}{9} = 1}$$

# Fractions: Calculating Workout

Workout C

$$\frac{4}{5}$$
 of 35 = 28

$$\frac{2}{3}$$
 of 60 = 40

$$\frac{2}{3}$$
 of 42 = 28

$$\frac{5}{6}$$
 of 36 =  $\boxed{30}$ 

$$\frac{2}{4}$$
 of 60 =  $30$ 

$$\frac{3}{5}$$
 of 100 =  $\frac{60}{}$ 

$$\frac{6}{7}$$
 of 35 = 30

$$\frac{2}{5}$$
 of 60 = 24

$$\frac{5}{8}$$
 of 96 = 60

$$\frac{7}{8}$$
 of 32 = 28

$$\frac{4}{6}$$
 of 60 = 40

$$\frac{7}{9}$$
 of 63 = 49

#### Make it Equal Game

Workout D

You need:

Fractions cards (at the bottom of this sheet.)

To play:

Shuffle the cards and place them face down on the table.

Player A picks 2 cards and adds the fractions to find the total.

Player B picks just one card and calculates the difference between their card and player A's total. This is Player B's score.

Players then swap roles.

Player A: My fractions are  $\frac{2}{8}$  and  $\frac{5}{8}$  so my total is  $\frac{7}{8}$  Player B: My fraction card is  $\frac{3}{8}$  so I score  $\frac{4}{8}$ 

(If Player B's card is equal to Player A's total then they score nothing.)

To win:

The winner is the first player to accumulate a score of over  $\frac{20}{8}$ 

 $\left[\begin{array}{c} \frac{1}{8} \end{array}\right] \left[\begin{array}{c} \frac{2}{8} \end{array}\right]$ 

<u>5</u>8

<u>6</u>8

**7**8



### Missing Number Workout

Put digits in the empty boxes to complete the calculations. Complete each one in several different ways.

Possible Solution

$$\frac{4}{5} + \frac{6}{5} = \frac{10}{5}$$

$$\frac{6}{7} = \frac{8}{7} - \frac{2}{7}$$

$$\frac{8}{9} + \frac{3}{9} = \frac{11}{9}$$

Are there any boxes that it is impossible to put a 8 in? Why?

Are there any boxes that could have any of the digits in them?

Now complete all the calculations together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.



# Magic Fractions Challenge

This works like a magic square.

The total in each horizontal, vertical or diagonal line of three is the same.

Every square has a different fraction in it.

Complete this Magic Square.

8 5	1 5	<u>6</u> 5		
<u>a </u> 6	9 ع	75		
4 5	<u>9</u> 5	2 5		

Now complete a Magic Square where the total is  $\frac{21}{8}$ 

#### Possible solution

5 8	<u>12</u> 8	4 8		
6 8	7 8	8		
<u>10</u> 8	2 8	9 8		

#### Word Problem Workout

Coco has a book with 232 pages. She reads  $\frac{3}{8}$  of the book. How many pages has she read?

87 pages

Colin is baking a cake. He has a bag of flour with 708g of flour in it. He uses  $\frac{5}{6}$  of the flour. What weight of flour does he use?

Coco has a bottle of lemonade. It has 910ml of lemonade in it. Coco drinks  $\frac{2}{7}$  of the lemonade. Colin drinks  $\frac{3}{7}$  of the lemonade. How much lemonade is left?

260 ml

Coco is making a fruit salad.  $\frac{1}{3}$  of the salad is apples. Oranges make up  $\frac{2}{q}$  of the salad. Bananas make up  $\frac{1}{q}$  of the salad. The rest of the salad is pears. What fraction of the salad is made up of pears?

Coco is baking cup cakes for the school fair. She takes  $\frac{3}{5}$  of the cakes to the fair and gives the rest to Colin. She gives 10 cup cakes to Colin. How many cup cakes did she bake altogether?  $\frac{3}{5}$  cup cakes

Create your own problems calculating with fractions.

#### Who am I? Workout

Use the clues to work out Colin's mystery number.

You may want to cross numbers off on the 100 grid as you consider each clue.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- 1) My tens digit is greater than the ones digit
- 2) I am not a multiple of 8
- 3) My digits are not square numbers
- 4) I am not a cube number
- 5) I am not a multiple of 7

- 6) I am not prime
- 7) I am not a multiple of 12
- 8) The difference between my digits is greater than 2
- 9) My tens digit is a cube number
- 10) I am not a multiple of 5

Colin's mystery number is

82

#### Create your own 'Who am I?' puzzle

2	3	4	5	6	7	8	9	10
12	13	14	15	16	17	18	19	20
22	23	24	25	26	27	28	29	30
32	33	34	35	36	37	38	39	40
42	43	44	45	46	47	48	49	50
52	53	54	55	56	57	58	59	60
62	63	64	65	66	67	68	69	70
72	73	74	75	76	77	78	79	80
82	83	84	85	86	87	88	89	90
92	93	94	95	96	97	98	99	100
	12 22 32 42 52 62 72 82	12 13 22 23 32 33 42 43 52 53 62 63 72 73 82 83	12     13     14       22     23     24       32     33     34       42     43     44       52     53     54       62     63     64       72     73     74       82     83     84	12     13     14     15       22     23     24     25       32     33     34     35       42     43     44     45       52     53     54     55       62     63     64     65       72     73     74     75       82     83     84     85	12     13     14     15     16       22     23     24     25     26       32     33     34     35     36       42     43     44     45     46       52     53     54     55     56       62     63     64     65     66       72     73     74     75     76       82     83     84     85     86	12     13     14     15     16     17       22     23     24     25     26     27       32     33     34     35     36     37       42     43     44     45     46     47       52     53     54     55     56     57       62     63     64     65     66     67       72     73     74     75     76     77       82     83     84     85     86     87	12     13     14     15     16     17     18       22     23     24     25     26     27     28       32     33     34     35     36     37     38       42     43     44     45     46     47     48       52     53     54     55     56     57     58       62     63     64     65     66     67     68       72     73     74     75     76     77     78       82     83     84     85     86     87     88	12     13     14     15     16     17     18     19       22     23     24     25     26     27     28     29       32     33     34     35     36     37     38     39       42     43     44     45     46     47     48     49       52     53     54     55     56     57     58     59       62     63     64     65     66     67     68     69       72     73     74     75     76     77     78     79       82     83     84     85     86     87     88     89

Please share your puzzle with Colin @MathsCanDo