



# 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

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

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

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

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

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

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

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

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

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

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

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

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



## 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  $\frac{20}{8}$

$$\frac{1}{8}$$

$$\frac{2}{8}$$

$$\frac{3}{8}$$

$$\frac{4}{8}$$

$$\frac{5}{8}$$

$$\frac{6}{8}$$

$$\frac{7}{8}$$



## Missing Number Workout

Workout E

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

Possible  
Solution

$$\begin{array}{|c|} \hline 4 \\ \hline \end{array} + \begin{array}{|c|} \hline 6 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 1 & 0 \\ \hline \end{array} \\ \begin{array}{|c|} \hline 5 \\ \hline \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \end{array} = \begin{array}{|c|} \hline 10 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 6 \\ \hline \end{array} = \begin{array}{|c|} \hline 8 \\ \hline \end{array} - \begin{array}{|c|} \hline 2 \\ \hline \end{array} \\ \begin{array}{|c|} \hline 6 \\ \hline \end{array} = \begin{array}{|c|} \hline 7 \\ \hline \end{array} - \begin{array}{|c|} \hline 1 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 8 \\ \hline \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 1 & 1 \\ \hline \end{array} \\ \begin{array}{|c|} \hline 8 \\ \hline \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \end{array} = \begin{array}{|c|} \hline 11 \\ \hline \end{array}$$

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

Workout F

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.

|               |               |               |
|---------------|---------------|---------------|
| $\frac{8}{5}$ | $\frac{1}{5}$ | $\frac{6}{5}$ |
| $\frac{3}{5}$ | $\frac{5}{5}$ | $\frac{7}{5}$ |
| $\frac{4}{5}$ | $\frac{9}{5}$ | $\frac{2}{5}$ |

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

Possible solution

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |

|                |                |               |
|----------------|----------------|---------------|
| $\frac{5}{8}$  | $\frac{12}{8}$ | $\frac{4}{8}$ |
| $\frac{6}{8}$  | $\frac{7}{8}$  | $\frac{8}{8}$ |
| $\frac{10}{8}$ | $\frac{2}{8}$  | $\frac{9}{8}$ |

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |



## Word Problem Workout

Workout G

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?

590 g

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  $\frac{2}{9}$  of the salad.  
Bananas make up  $\frac{1}{9}$  of the salad.  
The rest of the salad is pears.  
What fraction of the salad is made up of pears?

$\frac{3}{9}$

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?

25 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

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 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 |

Please share your puzzle with Colin @MathsCanDo