



Colin and Coco's Daily Maths Workout



Workout 5.11

Answers

Keep-uppI (Term 4)



KPIs for Term 4

Compare and order fractions whose denominators are all multiples of the same number

Read and write decimal numbers (up to 3 decimal places) as fractions

Understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100

Convert between adjacent units of metric measure



Decimals as Fractions Workout

Workout A

Write the decimals as fractions

$0.1 = \frac{1}{10}$

$0.07 = \frac{7}{100}$

$0.007 = \frac{7}{1000}$

$0.2 = \frac{2}{10}$

$0.3 = \frac{3}{10}$

$0.09 = \frac{9}{100}$

$0.077 = \frac{77}{1000}$

$0.291 = \frac{291}{1000}$

$0.7 = \frac{7}{10}$

$0.17 = \frac{17}{100}$

$0.707 = \frac{707}{1000}$

$0.29 = \frac{29}{100}$

$0.9 = \frac{9}{10}$

$0.39 = \frac{39}{100}$

$0.777 = \frac{777}{1000}$

$0.209 = \frac{209}{1000}$

Compare and Order Fractions Workout

Workout B

Compare the fractions using $<$, $>$ or $=$

Place the fractions in order from smallest to largest

$\frac{1}{4} < \frac{3}{8}$

$\frac{5}{9} < \frac{2}{3}$

$\frac{10}{12} = \frac{5}{6}$

$\frac{3}{4}, \frac{5}{8}, \frac{1}{2}$

$\frac{1}{2}, \frac{5}{8}, \frac{3}{4}$

$\frac{1}{3} < \frac{3}{6}$

$\frac{1}{2} < \frac{6}{10}$

$\frac{15}{20} < \frac{4}{5}$

$\frac{12}{9}, \frac{7}{6}, \frac{13}{18}, \frac{2}{3}$

$\frac{2}{3}, \frac{13}{18}, \frac{7}{6}, \frac{12}{9}$

$\frac{3}{4} > \frac{1}{2}$

$\frac{1}{2} = \frac{4}{8}$

$\frac{15}{20} = \frac{3}{4}$

$\frac{5}{9}, \frac{5}{5}, \frac{7}{3}, \frac{9}{5}$

$\frac{5}{9}, \frac{5}{5}, \frac{9}{5}, \frac{7}{3}$

$\frac{1}{5} < \frac{5}{10}$

$\frac{3}{4} < \frac{10}{12}$

$\frac{3}{5} > \frac{55}{100}$

$\frac{2}{5}, \frac{3}{10}, \frac{5}{20}, \frac{6}{100}$

$\frac{6}{100}, \frac{5}{20}, \frac{3}{10}, \frac{2}{5}$

Percentage Workout

Workout C

Complete the tables

Percentage	Fraction
1%	$\frac{1}{100}$
13%	$\frac{13}{100}$
9%	$\frac{9}{100}$
37%	$\frac{37}{100}$
79%	$\frac{79}{100}$

Percentage	Decimal
3%	0.03
37%	0.37
9%	0.09
19%	0.19
59%	0.59

Complete the using common equivalents

Percentage	Fraction
25%	$\frac{1}{4}$
50%	$\frac{1}{2}$
75%	$\frac{3}{4}$
10%	$\frac{1}{10}$
5%	$\frac{1}{20}$

Percentage	Fraction
30%	$\frac{3}{10}$
70%	$\frac{7}{10}$
40%	$\frac{2}{5}$
80%	$\frac{4}{5}$
12.5%	$\frac{1}{8}$



Ordering Fractions Game

Workout D

You need:

1-8 Digit Cards (print off the cards) for each player.

Card Set A (one per player)

Card Set B or C (one per player)

To play:

Each card set is shuffled and placed face down.

Each player picks one digit card from their Set A and places it on their Game Template as any numerator.

Each player picks one card from Set B (or C) and places it on their Game Template as any denominator.

Once cards have been placed they can not be moved.

Both players keep picking cards to create fractions.

The fractions must stay in order from smallest to largest.

The game ends when a player can not place a card to create a fraction that is in order with their other fractions.

To win:

The player who creates the most fractions in order scores one point.

If both players create the same number of fractions in order, they both score one point each.

Game Template

Smallest

Largest

$\frac{A}{B \text{ or } C}$	$\frac{A}{B \text{ or } C}$	$\frac{A}{B \text{ or } C}$	$\frac{A}{B \text{ or } C}$
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Ordering Fractions Game

Set A: 1 - 8 Digit Cards

1

2

3

4

5

6

7

8

Set B

2

4

8

16

Set C

3

6

12

18



Compare Fractions Workout

Workout E

Put different digits in the empty boxes so that the fraction statements are correct.

Possible
Solution

$$\frac{\boxed{7}}{1 \boxed{2}} < \frac{3}{\boxed{4}}$$

$$\frac{\boxed{6}}{\boxed{9}} > \frac{1}{\boxed{3}}$$

$$\frac{\boxed{8}}{\boxed{1} \boxed{0}} = \frac{4}{\boxed{5}}$$

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

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

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



Percentages Investigation

Workout F

Smallest



Largest



Largest

Investigate how to complete the grid using:

- only percentages
- 8 percentages and 8 fractions
- 8 percentages and 8 decimals
- 8 percentages, 4 fractions and 4 decimals



Word Problem Workout Measures

1. Colin and Coco are trying to run 5km each week.
The table shows the distances they have run so far this week.

	Coco	Colin
Monday	1.3km	1.5km
Tuesday	750m	450m
Wednesday	625m	0.8km

Who has the most distance to run to complete 5km this week? **Colin**
What is the difference in their remaining distances? **75m**

2. A 1kg sack contains 4 bags.
Three bags weigh the same.
The fourth bag is twice as heavy as the other bags.
How much does each bag weigh? **200g, 200g, 200g
400g**
3. A bottle contains 5 litres of water.
Coco pours the water into 4 bottles. Each bottle is the same size.
How many millilitres are in each bottle? **1,250ml**
4. A rope 3.6m long is cut into three pieces: A, B and C.
B is twice as long as A.
C is 3 times as long as A.
How much longer, in centimetres, is C than B? **60cm**
5. Colin needs to lose some weight. He is 130 kg.
His aim is to lose 750g per week.
If he does this, how many weeks will it be until he weighs 124 kg? **8 weeks**
6. Colin, Coco and KeePuppI are running a 1km relay race.
Colin runs 25% of the distance and Coco runs $\frac{3}{10}$ of the distance.
KeePuppI runs the rest of the distance.
How far does KeePuppI run? **450m**

Create your own word problems involving
the conversion of measures.



Matching Workout

Match the fractions with the correct order.
Fill in the missing buddies.

$\frac{2}{3}$		1 st	Largest
$\frac{5}{6}$		2 nd	
$\frac{11}{24}$		3 rd	
$\frac{1}{3}$		4 th	
$\frac{7}{24}$		5 th	
$\frac{3}{6}$		6 th	
$\frac{11}{12}$		7 th	

Match the Percentage with the Decimal with the Fraction.
Fill in the missing buddies.

17%		0.05		$\frac{17}{100}$
70%		0.71		$\frac{1}{4}$
5%		0.2		$\frac{5}{100}$
71%		0.17		$\frac{7}{10}$
50%		0.25		$\frac{1}{2}$
20%		0.7		$\frac{1}{5}$
25%		0.5		$\frac{71}{100}$

Create your own Matching Workouts