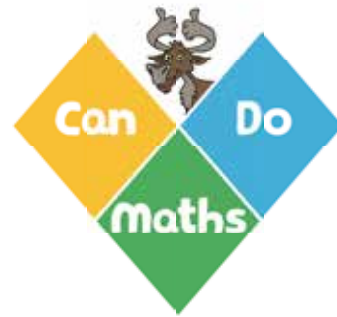




# Colin and Coco's Daily Maths Workout



Workout 6.10

Answers

Keep-uppI (Term 2)



KPIs for Term 2

Simplify fractions

Compare and order fractions, including fractions  $> 1$

Know and use simple fraction, decimal and percentage equivalents



# Simplify Fractions Workout

Workout A

Simplify the fractions fully:

$$\frac{6}{8} = \frac{3}{4}$$

$$\frac{3}{6} = \frac{1}{2}$$

$$\frac{14}{21} = \frac{2}{3}$$

$$\frac{12}{60} = \frac{1}{5}$$

$$\frac{4}{6} = \frac{2}{3}$$

$$\frac{6}{9} = \frac{2}{3}$$

$$\frac{35}{50} = \frac{7}{10}$$

$$\frac{21}{28} = \frac{3}{4}$$

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

$$\frac{9}{12} = \frac{3}{4}$$

$$\frac{18}{27} = \frac{2}{3}$$

$$\frac{36}{63} = \frac{4}{7}$$

$$\frac{16}{20} = \frac{4}{5}$$

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

$$\frac{18}{24} = \frac{3}{4}$$

$$\frac{27}{72} = \frac{3}{8}$$

Workout B

# Compare and Order Fractions Workout

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

Place the fractions in order from smallest to largest

$$\frac{3}{7} > \frac{3}{8}$$

$$\frac{8}{9} < \frac{5}{4}$$

$$\frac{10}{8} < \frac{10}{4}$$

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

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

$$\frac{5}{9} < \frac{5}{6}$$

$$\frac{9}{7} > \frac{9}{10}$$

$$\frac{3}{3} < 3$$

$$\frac{12}{9}, \frac{7}{4}, 1\frac{5}{12}, \frac{2}{3}$$

$$\frac{2}{3}, \frac{12}{9}, 1\frac{5}{12}, \frac{7}{4}$$

$$\frac{7}{7} = \frac{5}{5}$$

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

$$\frac{12}{4} = \frac{9}{3}$$

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

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

$$\frac{6}{7} < \frac{7}{8}$$

$$\frac{5}{4} > \frac{11}{12}$$

$$\frac{9}{2} > \frac{20}{5}$$

$$\frac{12}{6}, \frac{13}{7}, \frac{14}{8}, \frac{15}{9}$$

$$\frac{15}{9}, \frac{14}{8}, \frac{13}{7}, \frac{12}{6}$$

# FDP Workout

Workout C

Complete the tables.

Fraction	Decimal	Percentage
$\frac{7}{100}$	0.07	7%
$\frac{17}{100}$	0.17	17%
$\frac{23}{100}$	0.23	23%
$\frac{3}{100}$	0.03	3%
$\frac{37}{100}$	0.37	37%

Fraction	Decimal	Percentage
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	0.5	50%
$\frac{3}{4}$	0.75	75%
$\frac{3}{10}$	0.3	30%
$\frac{9}{10}$	0.9	90%

Fraction	Decimal	Percentage
$\frac{1}{20}$	0.05	5%
$\frac{6}{40}$	0.15	15%
$\frac{1}{8}$	0.125	12.5%
$\frac{5}{8}$	0.625	62.5%
$\frac{1}{3}$	0.3333...	$33\frac{1}{3}\%$



# Ordering Fractions Game

Workout D

You need:

Ordering Game template (one per player)

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

To play:

Each player shuffles their card set.

Each player picks one card and places it on their Game Template as a numerator or a denominator.

Each player picks another card and places it on their Game Template as a numerator or a denominator.

Both players keep picking digits to create fractions.

The fractions must stay in order from smallest to largest.

The game ends when a player can no longer 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 four fractions in order, they both score one point each.

The first player to get 10 points wins the Game.

Smallest




Largest




## Ordering Fractions Game

Player 1

1	2	3	4
5	6	7	8

Player 2

1	2	3	4
5	6	7	8



# Simplify Fractions Workout

Workout E

Put different digits in the empty boxes so that the fractions are simplified.

Possible  
Solution

$$\frac{\begin{array}{|c|c|} \hline 1 & 0 \\ \hline \end{array}}{\begin{array}{|c|c|} \hline 1 & 8 \\ \hline \end{array}} = \frac{\begin{array}{|c|} \hline 5 \\ \hline \end{array}}{\begin{array}{|c|} \hline 9 \\ \hline \end{array}}$$

$$\frac{\begin{array}{|c|} \hline 5 \\ \hline \end{array}}{\begin{array}{|c|c|} \hline 3 & 0 \\ \hline \end{array}} = \frac{\begin{array}{|c|} \hline 1 \\ \hline \end{array}}{\begin{array}{|c|} \hline 6 \\ \hline \end{array}}$$

$$\frac{\begin{array}{|c|} \hline 7 \\ \hline \end{array}}{\begin{array}{|c|c|} \hline 1 & 4 \\ \hline \end{array}} = \frac{\begin{array}{|c|} \hline 1 \\ \hline \end{array}}{\begin{array}{|c|} \hline 2 \\ \hline \end{array}}$$

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.



# Compare Fractions Investigation

Find 16 fractions to solve this puzzle.

Smallest  Largest


Largest

Investigate using:

- only proper fractions
- fractions with different denominators
- fractions with the same numerators
- only improper fractions



## Word Problem Workout FDP and Compare Fractions

1. Coco runs  $\frac{2}{5}$  around a running track. Colin runs 25% around the track.

Who has run the furthest?

Coco

2. Colin eats  $\frac{6}{7}$  of his cake. Coco eats  $\frac{5}{6}$  of her cake.

Who has eaten more of their cake?

Colin

3. In a test Colin gets 14 out of 20 correct.  
Coco gets 75% correct.

Who has the higher mark?

Coco

4. The 'Get A Bargain' shop has a 15% sale.  
The 'Not Beaten on Price' Shop has a ' $\frac{1}{5}$  off' sale.  
Which shop offers the most discount?

Not Beaten on Price

5. Coco is making a cake.  
The cake needs:

0.4kg of flour

35% of a kilogram of margarine

$\frac{3}{8}$  kg of sugar

Put the three ingredients in order of the amount needed, from least to most.

Margarine

Sugar

Flour

6. Colin and Coco are running for School Captain.  
60% of the school voted for Coco.  
60 pupils voted for Colin.  
How many pupils voted altogether?

150

Create your own word problems involving  
fractions, decimals and percentages



# Matching Workout

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

$\frac{6}{5}$		1 <sup>st</sup>	Largest
$\frac{5}{4}$		2 <sup>nd</sup>	
$\frac{9}{5}$		3 <sup>rd</sup>	
$\frac{3}{7}$		4 <sup>th</sup>	
$\frac{5}{9}$		5 <sup>th</sup>	
$\frac{5}{6}$		6 <sup>th</sup>	
$\frac{7}{3}$		7 <sup>th</sup>	

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

15%		0.05		$\frac{3}{20}$
30%		0.51		$\frac{1}{3}$
5%		0.2		$\frac{5}{100}$
51%		0.15		$\frac{3}{10}$
50%		0.33333....		$\frac{1}{2}$
20%		0.3		$\frac{1}{5}$
$33\frac{1}{3}\%$		0.5		$\frac{51}{100}$

Create your own Matching Workouts