



Keep-uppI Maths Workout



Year 6 - Pack 3

Answers



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

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 st	Largest
$\frac{5}{4}$		2 nd	
$\frac{9}{5}$		3 rd	
$\frac{3}{7}$		4 th	
$\frac{5}{9}$		5 th	
$\frac{5}{6}$		6 th	
$\frac{7}{3}$		7 th	

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