# Colin and Coco's Daily Maths Workout 

## Workout 6.10

## Answers

## KeeP-uppI (Term 2)



Simplify fractions
Compare and order fractions, including fractions > 1
Know and use simple fraction, decimal and percentage equivalents

Simplify the fractions fully:
$\frac{6}{8}=\frac{3}{4}$
$\frac{3}{6}=\frac{1}{2}$
$\frac{14}{21}=\frac{2}{3}$
$\frac{12}{60}=\frac{1}{5}$
$\frac{4}{6}=\frac{2}{3}$
$\frac{6}{9}=\frac{2}{3}$
$\frac{35}{50}=\frac{7}{10}$
$\frac{21}{28}=\frac{3}{4}$
$\frac{10}{12}=\frac{5}{6}$
$\frac{9}{12}=\frac{3}{4}$
$\frac{18}{27}=\frac{2}{3}$
$\frac{36}{63}=\frac{4}{7}$
$\frac{16}{20}=\frac{4}{5}$
$\frac{15}{20}=\frac{3}{4}$
$\frac{18}{24}=\frac{3}{4}$
$\frac{27}{72}=\frac{3}{8}$

## Compare and Order Fractions Workout

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

| $\frac{3}{7} \ominus \frac{3}{8}$ | $\frac{8}{9}<\frac{5}{4}$ | $\frac{10}{8} \odot \frac{10}{4}$ |
| :---: | :---: | :---: |
| $\frac{5}{9}<\frac{5}{6}$ | $\frac{9}{7} \ominus \frac{9}{10}$ | $\frac{3}{3}<3$ |
| $\frac{7}{7} \fallingdotseq \frac{5}{5}$ | $\frac{2}{3} \odot \frac{3}{2}$ | $\frac{12}{4} \fallingdotseq \frac{9}{3}$ |
| $\frac{6}{7}<\frac{7}{8}$ | $\frac{5}{4} \ominus \frac{11}{12}$ | $\frac{9}{2} \ominus \frac{20}{5}$ |

Place the fractions in order from smallest to largest
$\frac{1}{2}, \frac{3}{4} \frac{3}{8}, \frac{4}{3} \frac{3}{8}, \frac{1}{2}, \frac{3}{4}, \frac{4}{3}$
$\frac{12}{9}, \frac{7}{4}, 1 \frac{5}{12}, \frac{2}{3} \quad \frac{2}{3}, \frac{12}{9}, 1 \frac{5}{12}, \frac{7}{4}$
$\frac{5}{9}, \frac{5}{5}, \frac{7}{3}, \frac{9}{5} \quad \frac{5}{9}, \frac{5}{5}, \frac{9}{5}, \frac{7}{3}$
$\frac{12}{6}, \frac{13}{7}, \frac{14}{8}, \frac{15}{9}$
$\frac{15}{9}, \frac{14}{8}, \frac{13}{7}, \frac{12}{6}$

## 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 | $62.5 \%$ |
| $\frac{1}{3}$ | $0.3333 \ldots$ | $33 \frac{1}{3} \%$ |

## Ordering Fractions Game

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 numertor or a denominator.
Each player picks another card and places it on their Game Template as a numertor 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 fractins in order, they boty score one point each.

The first player to get 10 points wins the Game.

Smallest
Largest


## Ordering Fractions Game

Player 1


Player 2


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

## Possible Solution

$$
\begin{aligned}
& \begin{array}{|l|l|}
\hline 1 & 0 \\
\hline \hline 1 & 8 \\
\hline &
\end{array}=\begin{array}{l}
\mid 5 \\
\hline \hline 9 \\
\hline
\end{array} \\
& \frac{5}{20}=\frac{1}{\square-6} \\
& \frac{7}{71}=\frac{\boxed{1}}{\boxed{12}}
\end{aligned}
$$

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 <br> Investigation

Find 16 fractions to solve this puzzle.


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?

## 3. In a test Colin gets 14 out of 20 correct. Coco gets $75 \%$ correct. <br> Who has the higher mark?

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:
0.4 kg of flour $\quad 35 \%$ of a kilogram of margarine $\quad \frac{3}{8} \mathrm{~kg}$ 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?

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

| $\frac{6}{5}$ |
| :---: |
| $\frac{5}{4}$ |
| $\frac{9}{5}$ |
| $\frac{3}{7}$ |
| $\frac{5}{9}$ |
| $\frac{7}{3}$ |

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


Create your own Matching Workouts

