

Homework/Extension

Step 1: Fractions to Percentages

National Curriculum Objectives:

Mathematics Year 6: (6F11) [Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Tick the fractions that are equal to a given percentage, where the denominators are 10 or 100.

Expected Tick the fractions that are equal to a given percentage, where the denominators are factors of 100.

Greater Depth Tick the fractions that are equal to a given percentage, where the denominators are not always factors of 100.

Questions 2, 5 and 8 (Varied Fluency)

Developing Convert the fractions to percentages, where the denominator is 10 or 100.

Expected Convert the fractions to percentages, where the denominator is a factor of 100.

Greater Depth Convert the fractions to percentages, where the denominator is not always a factor of 100.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Explain the mistake when a fraction and percentage of a larger square is shaded, where total number of smaller squares is 10.

Expected Explain the mistake when a fraction and percentage of a larger square is shaded, where total number of smaller squares is a factor of 100.

Greater Depth Explain the mistake when a fraction and percentage of a larger square is shaded, where total number of smaller squares is not a factor of 100.

More [Year 6 Percentages](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Fractions to Percentages

1. Tick the fractions that are equal to 30%.

$\frac{30}{10}$	$\frac{30}{100}$	$\frac{3}{100}$	$\frac{1}{10}$	$\frac{3}{10}$	$\frac{33}{100}$
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



VF
HW/Ext

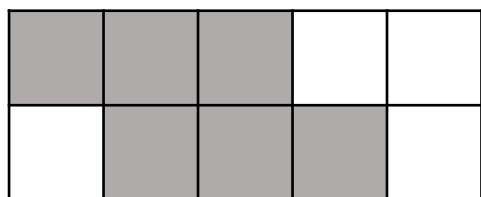
2. Convert each fraction to a percentage.

$\frac{8}{10}$	$\frac{50}{100}$	$\frac{2}{10}$	$\frac{75}{100}$	$\frac{1}{10}$	$\frac{48}{100}$
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
%	%	%	%	%	%



VF
HW/Ext

3. Jerry says,



I think that 6% of the rectangle is shaded because 6 squares are shaded.



Explain his mistake.



RPS
HW/Ext

Fractions to Percentages

4. Tick the fractions that are equal to 40%.

$$\frac{9}{20}$$

$$\frac{2}{5}$$

$$\frac{15}{50}$$

$$\frac{10}{25}$$

$$\frac{4}{10}$$

$$\frac{2}{4}$$



VF
HW/Ext

5. Convert each fraction to a percentage.

$$\frac{8}{25}$$

$$\frac{4}{5}$$

$$\frac{36}{50}$$

$$\frac{9}{20}$$

$$\frac{2}{10}$$

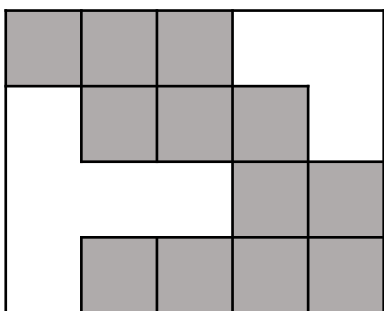
$$\frac{1}{4}$$

%	%	%	%	%	%
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VF
HW/Ext

6. Jade says,



I think that 70% of the rectangle is shaded because $\frac{12}{20}$ converted to a percentage is 70%.



Explain her mistake.



RPS
HW/Ext

Fractions to Percentages

7. Tick the fractions that are equal to 60%.

$$\frac{27}{45}$$

$$\frac{27}{36}$$

$$\frac{39}{65}$$

$$\frac{45}{60}$$

$$\frac{48}{80}$$

$$\frac{25}{40}$$



VF
HW/Ext

8. Convert each fraction to a percentage.

$$\frac{13}{52}$$

$$\frac{18}{36}$$

$$\frac{22}{40}$$

$$\frac{28}{32}$$

$$\frac{35}{56}$$

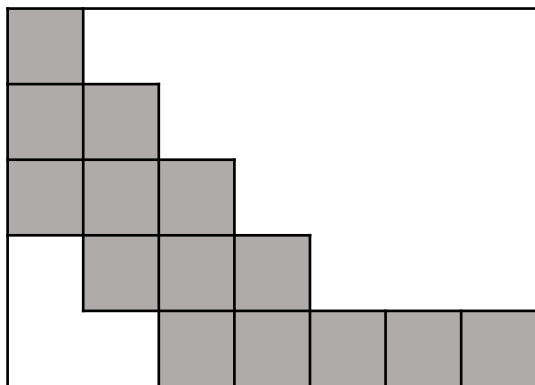
$$\frac{18}{30}$$

%	%	%	%	%	%
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VF
HW/Ext

9. Joe says,



For 80% of the shape to be shaded, I need to colour in 10 more squares.



Explain his mistake.



RPS
HW/Ext

Homework/Extension

Fractions to Percentages

Developing

1. $\frac{3}{10}$ and $\frac{30}{100}$

2. 80%, 50%, 20%, 75%, 10%, 48%

3. Jerry has forgotten that a percentage is out of 100, so 60% is shaded because each small square is worth 10%, not 1%.

Expected

4. $\frac{2}{5}$, $\frac{10}{25}$ and $\frac{4}{10}$

5. 32%, 80%, 72%, 45%, 20%, 25%

6. Jade has incorrectly converted $\frac{12}{20}$ to 70%. If you divide the 12 and 20 by 4 then the equivalent fraction is $\frac{3}{5}$ which equals 60%.

Greater Depth

7. $\frac{27}{45}$, $\frac{39}{65}$ and $\frac{48}{80}$

8. 25%, 50%, 55%, 87.5%, 62.5%, 60%

9. Joe is incorrectly calculated the amount of squares he needs to shade. 14 of the 35 squares are shaded, which is 40% of the shape. To shade 80%, he needs to double the amount of squares shaded. Therefore, he must shade 14 more squares, not 10. $\frac{28}{35}$ is equal to 80%.