

Lesson 13 – Writing one Number as a Percentage of Another

Starter

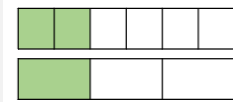
- 1) Change $\frac{3}{20}$ to a decimal
- 2) Change $4\frac{1}{3}$ to an improper fraction
- 3) Draw a diagram to show that $\frac{2}{6}$ is the same as $\frac{1}{3}$
- 4) Write 30 as a fraction of 35

Starter Answers

1) 0.15

2) $\frac{13}{3}$

3)



4) $\frac{30}{35} = \frac{6}{7}$

Each of these questions is asking the same thing.

- 1) Write 7 as a percentage of 10
- 2) What percentage of 10 is 7?
- 3) On a test, Sam scores 7 out of 10. What percentage is this?

Example 1

- 1) Write 24 as a percentage of 40

First write 24 as a fraction of 40: $\frac{24}{40} = \frac{6}{10} = \frac{3}{5}$

So, 24 is $\frac{3}{5}$ of 40

Now write $\frac{3}{5}$ as a percentage: $\frac{3}{5} = \frac{6}{10} = \frac{60}{100}$

This is 60%

- 2) What fraction is 15 of 20?

As a fraction: $\frac{15}{20} = \frac{3}{4}$

Now change $\frac{3}{4}$ to a percentage: $\frac{3}{4} = \frac{75}{100}$

This is 75%

- 3) George scored 16 out of 40 on a test. What percentage did he get?

As a fraction: $\frac{16}{40} = \frac{4}{10} = \frac{2}{5}$

Change $\frac{2}{5}$ to a percentage: $\frac{2}{5} = \frac{4}{10} = \frac{40}{100}$

George got a score of 40%

Your go

- 1) Write 30 as a percentage of 60
- 2) 24 is ___% of 80
- 3) What percentage is 8 of 25?
- 4) 30 is ___% of 25

Answers

- 1) 50% 2) 30% 3) 32% 4) 120%