Comparing Fractions, Decimals and Percentages – Level Two

How to Guide - ANSWERS

Question 1

a) What is $\frac{3}{8}$ as a decimal? **0.375**

$3 \div 8 = 0.375$

b) What is $\frac{1}{3}$ as a decimal? *Round your answer to 2 d.p.* **0.33**

$1 \div 3 = 0.33333333$

c) What is $\frac{4}{7}$ as a decimal? **0.57**

$4 \div 7 = 0.57143$

Question 2

a) What is 0.65 as a fraction in its simplest form? $\mathbf{\frac{13}{20}}$

$\frac{65}{100} \rightarrow \frac{65 \div 5}{100 \div 5} = \frac{13}{20}$

b) What is 0.120 as a fraction in its simplest form? $\mathbf{\frac{3}{25}}$

$\frac{120}{1000} \rightarrow \frac{12}{100} \rightarrow \frac{12 \div 4}{100 \div 4} = \frac{3}{25}$

c) What is 0.6 as a fraction in its simplest form? $\mathbf{\frac{3}{5}}$

$\frac{6}{10} \rightarrow \frac{6}{10} \rightarrow \frac{6 \div 2}{10 \div 2} = \frac{3}{5}$

Question 3

a) What is 0.65 as a percentage? **65%**

0.65 x 100 = 65

b) What is 0.3 as a percentage? **30%**

0.3 x 100 = 30

c) What is 0.02 as a percentage? **2%**

0.02 x 100 = 2

d) What is 42% as a decimal? **0.42**

42 ÷ 100 = 0.42

e) What is 4% as a decimal? **0.04**

4 ÷ 100 = 0.04

f) what is 125% as a decimal? **1.25**

125 ÷ 100 = 1.25

This is a bit of an exception to the pattern as the percentage is over 100 this means the decimal will be greater than 1

Question 4

a) What is $\frac{7}{8}$ as a percentage? **87.5%**

7 ÷ 8 = 0.875

0.875 x 100 = 87.5

b) What is 4% as a fraction? $\mathbf{\frac{1}{25}}$

$4 \div 100 = 0.04$

$\frac{4}{100} \rightarrow \frac{4 \div 4}{100 \div 4} = \frac{1}{25}$

OR you could start by creating $\frac{4}{100}$ and miss out the first step.

c) What is $\frac{1}{2}$ as a percentage? **50%**

$1 \div 2 = 0.5$

0.5 x 100 = 50

This is one that you should learn.

d) What is 0.15 as a fraction? $\mathbf{\frac{3}{20}}$

$\frac{15}{100} \rightarrow \frac{15 \div 5}{100 \div 5} = \frac{3}{20}$

Mixed Questions

a) What is $\frac{4}{5}$ as a percentage? **80%**

$4 \div 5 = 0.8$

0.8 x 100 = 80%

OR

$\frac{4 \times 20}{5 \times 20} = \frac{80}{100}$ = 80%

b) What is 0.07 as a fraction? $\mathbf{\frac{7}{100}}$

$\frac{7}{100}$ cannot be simplified

c) What is 0.52 as a percentage? **52%**

0.52 x 100 = 52

d) What is 27% as a decimal? **0.27**

$27 \div 100 = 0.27$

e) What is 0.8 as a fraction? $\mathbf{\frac{4}{5}}$

$\frac{8}{10} \rightarrow \frac{8 \div 2}{10 \div 2} = \frac{4}{5}$

f) What is $\frac{3}{8}$ as a decimal? **0.38** to 2 d.p.

$3 \div 8 = 0.375$

g) What is 70% as a fraction? $\mathbf{\frac{7}{10}}$

$\frac{70}{100} \rightarrow \frac{7}{10}$

OR $70 \div 100 = 0.7$ then turn into a fraction $\frac{7}{10}$

h) What is 0.09 as a percentage? **9%**

0.09 x 100 = 9