

GCSE Maths: Fractions, decimals and percentages (Foundation): answers

GCSE Maths - Fractions - Foundation - Lesson 3.9

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch03-fractions/foundation/fractions-decimals-and-percentages/

Exercise 31 Fractions, decimals and percentages Non-calculator

1 Write each fraction as a decimal.

(a) $\frac{1}{2}$

Answer: 0.5

(b) $\frac{3}{4}$

Answer: 0.75

(c) $\frac{1}{5}$

Answer: 0.2

(d) $\frac{7}{10}$

Answer: 0.7

(e) $\frac{3}{8}$

Answer: 0.375

(f) $\frac{9}{20}$

Answer: 0.45

2 Write each decimal as a fraction in its simplest form.

(a) 0.5

Answer: $\frac{1}{2}$

(b) 0.2

Answer: $\frac{1}{5}$

(c) 0.75

Answer: $\frac{3}{4}$

(d) 0.35

Answer: $\frac{7}{20}$

(e) 0.08

Answer: $\frac{2}{25}$

(f) 0.125

Answer: $\frac{1}{8}$

3 Write each fraction as a percentage.

(a) $\frac{1}{4}$

Answer: 25%

(b) $\frac{3}{5}$

Answer: 60%

(c) $\frac{7}{20}$

Answer: 35%

(d) $\frac{9}{10}$

Answer: 90%

(e) $\frac{3}{25}$

Answer: 12%

(f) $\frac{5}{8}$

Answer: 62.5%

4 Write each percentage as a fraction in its simplest form.

(a) 20%

Answer: $\frac{1}{5}$

(b) 45%

Answer: $\frac{9}{20}$

(c) 12%

Answer: $\frac{3}{25}$

(d) 75%

Answer: $\frac{3}{4}$

(e) 5%

Answer: $\frac{1}{20}$

(f) 60%

Answer: $\frac{3}{5}$

5 Copy and complete the table.

Fraction	Decimal	Percentage
$\frac{3}{5}$	?	?
?	0.4	?
?	?	85%

Answer: $\frac{3}{5}$, 0.6, 60% $\frac{2}{5}$, 0.4, 40% $\frac{17}{20}$, 0.85, 85%

6 Write these in order, smallest first: $\frac{3}{5}$, 0.55, 58%, $\frac{5}{8}$

Answer: 0.55, 58%, $\frac{3}{5}$, $\frac{5}{8}$ (= 55%, 58%, 60%, 62.5%)

7 In a test Priya scored $\frac{17}{20}$ and Raj scored 82%. Who did better?

Answer: Priya: $\frac{17}{20} = 85\%$, which is more than 82%

8 Sara says " $\frac{1}{3}$ is 0.3". Explain why she is not quite right.

Answer: $1 \div 3 = 0.333\ldots$ recurring ($0.\dot{3}$). 0.3 is only $\frac{3}{10}$, which is smaller.

9 **Challenge.** A recipe uses 0.375 kg of flour. Write this as a fraction of 1 kg, in its simplest form.

Answer: $\frac{3}{8}$ kg