

GCSE Maths: Decimals and fractions (Foundation): answers

GCSE Maths - Decimals, Rounding and Estimation - Foundation - Lesson 4.5

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch04-decimals-rounding-estimation/foundation/decimals-and-fractions/

Exercise 4E Decimals and fractions

Non-calculator

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

(a) 0.7

Answer: $\frac{7}{10}$

(b) 0.25

Answer: $\frac{1}{4}$

(c) 0.6

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

(d) 0.35

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

(e) 0.125

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

(f) 0.04

Answer: $\frac{1}{25}$

2 Write each fraction as a decimal.

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

Answer: 0.5

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

Answer: 0.6

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

Answer: 0.45

(d) $\frac{13}{25}$

Answer: 0.52

(e) $\frac{17}{50}$

Answer: 0.34

(f) $\frac{4}{5}$

Answer: 0.8

3 Write each fraction as a decimal.

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

Answer: 0.375

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

Answer: 0.625

(c) $\frac{1}{8}$

Answer: 0.125

(d) $\frac{7}{40}$

Answer: 0.175

4 Write each decimal as a mixed number in its simplest form.

(a) 3.5

Answer: $3\frac{1}{2}$

(b) 1.25

Answer: $1\frac{1}{4}$

(c) 2.04

Answer: $2\frac{1}{25}$

(d) 6.8

Answer: $6\frac{4}{5}$

5 Write each mixed number as a decimal.

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

Answer: 2.5

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

Answer: 4.75

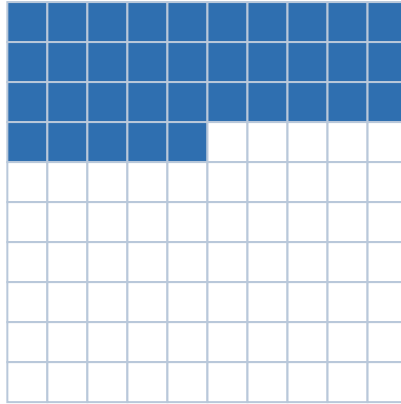
(c) $1\frac{7}{10}$

Answer: 1.7

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

Answer: 3.375

- 6 The diagram is a 10 by 10 grid. Some of the squares are shaded. Write the shaded part as a decimal and as a fraction in its simplest form.



Answer: $0.35 = \frac{7}{20}$

- 7 Write these in order, smallest first.

(a) $0.4, \frac{3}{8}, 0.35$

Answer: $0.35, \frac{3}{8}, 0.4$

(b) $\frac{7}{10}, 0.65, \frac{4}{5}, 0.7$

Answer: $0.65, \frac{7}{10}, 0.7, \frac{4}{5}$

(c) $0.55, \frac{1}{2}, \frac{9}{20}, 0.5$

Answer: $\frac{9}{20}, \frac{1}{2}, 0.5, 0.55$

- 8 Which is bigger, $\frac{3}{8}$ or 0.4? Show your working.

Answer: 0.4

- 9 A bag of flour has a mass of 1.5 kg. Joe uses $\frac{3}{5}$ of the flour. How many kilograms of flour does he use?

Answer: 0.9 kg

- 10 Explain why $0.5 = \frac{5}{10} = \frac{1}{2}$.

Answer: 5 tenths simplifies to one half

- 11 Is 0.3 the same as $\frac{3}{100}$? Give a reason.

Answer: No, $0.3 = \frac{3}{10}$

12 Write a fraction that is between 0.3 and 0.4. Give your answer in the form $\frac{a}{b}$ where b is no more than 20.

Answer: $\frac{7}{20}$ (other answers are possible)