

GCSE Maths: Adding and subtracting fractions (Foundation): answers

GCSE Maths - Fractions - Foundation - Lesson 3.5

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/adding-and-subtracting-fractions/

Exercise 3E Adding and subtracting fractions Non-calculator

1 Work out. Give each answer in its simplest form.

(a) $\frac{2}{7} + \frac{3}{7}$

Answer: $\frac{5}{7}$

(b) $\frac{5}{9} + \frac{2}{9}$

Answer: $\frac{7}{9}$

(c) $\frac{7}{10} - \frac{3}{10}$

Answer: $\frac{2}{5}$

(d) $\frac{11}{12} - \frac{5}{12}$

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

2 Work out.

(a) $\frac{1}{2} + \frac{1}{4}$

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

(b) $\frac{1}{3} + \frac{1}{6}$

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

(c) $\frac{2}{5} + \frac{1}{10}$

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

(d) $\frac{3}{4} - \frac{1}{8}$

Answer: $\frac{5}{8}$

(e) $\frac{5}{6} - \frac{1}{3}$

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

(f) $\frac{7}{8} - \frac{3}{4}$

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

3 Work out.

(a) $\frac{1}{3} + \frac{1}{4}$

Answer: $\frac{7}{12}$

(b) $\frac{2}{5} + \frac{1}{3}$

Answer: $\frac{11}{15}$

(c) $\frac{3}{4} - \frac{2}{5}$

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

(d) $\frac{7}{8} - \frac{1}{3}$

Answer: $\frac{13}{24}$

(e) $\frac{5}{6} + \frac{3}{4}$

Answer: $1 \frac{7}{12}$

(f) $\frac{4}{5} - \frac{3}{10}$

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

4 Work out. Give each answer as a mixed number or fraction in its simplest form.

(a) $1 \frac{1}{2} + 2 \frac{1}{4}$

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

(b) $3 \frac{2}{5} + 1 \frac{1}{2}$

Answer: $4 \frac{9}{10}$

(c) $2 \frac{2}{3} + 1 \frac{3}{4}$

Answer: $4 \frac{5}{12}$

(d) $4\frac{1}{2} - 1\frac{1}{3}$

Answer: $3\frac{1}{6}$

(e) $3\frac{1}{4} - 1\frac{1}{2}$

Answer: $1\frac{3}{4}$

(f) $5\frac{1}{6} - 2\frac{2}{3}$

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

- 5 Maya walks $\frac{2}{3}$ km to the shop and then $\frac{3}{4}$ km on to the park. How far does she walk altogether?

Answer: $1\frac{5}{12}$ km

- 6 A jug holds $\frac{5}{6}$ litre of juice. $\frac{1}{4}$ litre is poured out. How much is left?

Answer: $\frac{7}{12}$ litre

- 7 A plank is $3\frac{1}{2}$ m long. $1\frac{3}{4}$ m is cut off. How long is the piece that is left?

Answer: $1\frac{3}{4}$ m

- 8 Dev says " $\frac{1}{3} + \frac{1}{4} = \frac{2}{7}$ ". Explain his mistake and work out the correct answer.

Answer: He added the denominators. Correct: $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$

- 9 In a school, $\frac{1}{2}$ of the pupils walk, $\frac{1}{5}$ take the bus and the rest cycle. What fraction of the pupils cycle?

Answer: $\frac{3}{10}$

- 10 **Challenge.** The sum of two fractions, one with denominator 3 and one with denominator 4, is $\frac{17}{12}$. Find the two fractions.

Answer: $\frac{2}{3} + \frac{3}{4} = \frac{8}{12} + \frac{9}{12} = \frac{17}{12}$