

1 Simplifying fractions

- a) Write $\frac{135}{225}$ in its simplest form.
- b) Which of these is not equal to $\frac{2}{3}$?

$$\frac{14}{21} \quad \frac{26}{39} \quad \frac{34}{51} \quad \frac{38}{56}$$

a) $\div 45: \frac{3}{5}$

b) $\frac{38}{56} = \frac{19}{28}$, not $\frac{2}{3}$

2 Ordering fractions

- a) Write in order, largest first. $\frac{5}{6} \quad \frac{7}{9} \quad \frac{4}{5} \quad \frac{11}{15}$
- b) Which is closer to $\frac{1}{2}$, $\frac{5}{9}$ or $\frac{7}{15}$? Show how you know.

a) $\frac{5}{6}, \frac{4}{5}, \frac{7}{9}, \frac{11}{15}$

b) $\frac{5}{9} - \frac{1}{2} = \frac{1}{18}, \frac{1}{2} - \frac{7}{15} = \frac{1}{30}$

b) $\frac{7}{15}$ is closer

3 Mixed numbers

- a) Write $4\frac{5}{7}$ as an improper fraction.
- b) Find the missing numbers. $5\frac{\square}{8} = \frac{43}{8}$ and $\square\frac{2}{9} = \frac{38}{9}$

a) $4 \times 7 + 5 = 33$

b) $43 - 40 = 3, 38 = 4 \times 9 + 2$

a) $\frac{33}{7}$ b) 3 and 4

4 Adding and subtracting fractions

- a) Work out $\frac{5}{8} + \frac{7}{12}$
- b) Find the missing fraction. $\frac{3}{4} - \square = \frac{2}{7}$

a) $\frac{15}{24} + \frac{14}{24} = \frac{29}{24}$

b) $\frac{21}{28} - \frac{8}{28}$

a) $1\frac{5}{24}$ b) $\frac{13}{28}$

Fractions

revision mat answers

5 Adding and subtracting mixed numbers

- a) Work out $5\frac{1}{6} - 2\frac{3}{4}$
- b) A triangle has sides of $2\frac{1}{3}$ cm, $3\frac{3}{4}$ cm and $4\frac{1}{2}$ cm. Work out its perimeter.

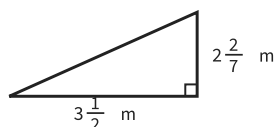
a) $\frac{62}{12} - \frac{33}{12} = \frac{29}{12}$

b) $9 + \frac{4}{12} + \frac{9}{12} + \frac{6}{12} = 9\frac{19}{12}$

a) $2\frac{5}{12}$ b) $10\frac{7}{12}$ cm

6 Multiplying fractions

- a) Work out $\frac{4}{15} \times \frac{25}{28}$
- b) Work out the area of this triangle. It is not drawn to scale.



a) $\frac{5}{21}$ b) $\frac{1}{2} \times \frac{7}{2} \times \frac{16}{7} = 4 \text{ m}^2$

7 Dividing fractions

- a) Work out $\frac{9}{14} \div \frac{3}{7}$
- b) Find the missing number. $\square \times \frac{2}{3} = 5\frac{1}{3}$

a) $\frac{9}{14} \times \frac{7}{3} = \frac{63}{42}$

b) $\frac{16}{3} \div \frac{2}{3} = \frac{16}{3} \times \frac{3}{2}$

a) $1\frac{1}{2}$ b) 8

8 Dividing fractions: problems

- a) How many $\frac{3}{4}$ litre bottles can be filled from 12 litres of juice?
- b) A rectangle has an area of $8\frac{2}{3} \text{ m}^2$ and a length of $3\frac{1}{4} \text{ m}$. Work out its width.

a) $12 \times \frac{4}{3} = 16 \text{ bottles}$

b) $\frac{26}{3} \times \frac{4}{13} = \frac{8}{3} = 2\frac{2}{3} \text{ m}$