

1 Simplifying fractions

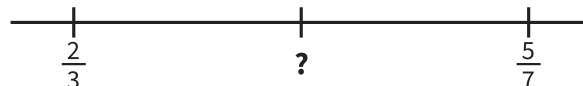
- a) Write $\frac{84}{126}$ in its simplest form.
- b) What fraction of 2 hours is 45 minutes?
Give your answer in its simplest form.

$$a) \div 42: \frac{2}{3}$$

$$b) \frac{45}{120} = \frac{3}{8}$$

2 Ordering fractions

- a) Write in order, smallest first. $\frac{7}{10}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{5}{8}$
- b) Find the fraction halfway between $\frac{2}{3}$ and $\frac{5}{7}$.



$$a) \frac{5}{8}, \frac{2}{3}, \frac{7}{10}, \frac{3}{4}$$

$$b) \frac{28}{42} \text{ and } \frac{30}{42}, \text{ so } \frac{29}{42}$$

3 Mixed numbers

- a) Write $\frac{53}{8}$ as a mixed number.
- b) Which is bigger, $\frac{29}{4}$ or $7\frac{2}{7}$? Show how you know.

$$a) 6\frac{5}{8}$$

$$b) \frac{29}{4} = 7\frac{1}{4} = 7\frac{7}{28}, 7\frac{2}{7} = 7\frac{8}{28}$$

$$b) 7\frac{2}{7} \text{ is bigger}$$

4 Adding and subtracting fractions

- a) Work out $\frac{7}{12} - \frac{2}{9}$
- b) $\frac{1}{3}$ of a garden is lawn and $\frac{2}{5}$ is patio. The rest is flower beds. What fraction of the garden is flower beds?

$$a) \frac{21}{36} - \frac{8}{36} = \frac{13}{36}$$

$$b) \frac{5}{15} + \frac{6}{15} = \frac{11}{15}$$

$$b) 1 - \frac{11}{15} = \frac{4}{15}$$

Fractions revision mat answers

Higher A

5 Adding and subtracting mixed numbers

- a) Work out $3\frac{2}{5} + 1\frac{5}{6}$
- b) A plank is $6\frac{1}{4}$ m long. Pieces of $1\frac{5}{6}$ m and $2\frac{2}{3}$ m are cut off it. How much of the plank is left?

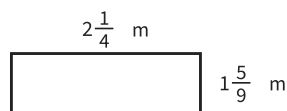
$$a) 4 + \frac{12}{30} + \frac{25}{30} = 5\frac{7}{30}$$

$$b) \frac{75}{12} - \frac{22}{12} - \frac{32}{12} = \frac{21}{12}$$

$$b) 1\frac{3}{4} \text{ m}$$

6 Multiplying fractions

- a) Work out $\frac{5}{6} \times \frac{9}{10}$
- b) Work out the area of this rectangle. It is not drawn to scale.



$$a) \frac{3}{4} \quad b) \frac{9}{4} \times \frac{14}{9} = \frac{14}{4} = 3\frac{1}{2} \text{ m}^2$$

7 Dividing fractions

- a) Work out $\frac{7}{8} \div \frac{21}{32}$
- b) Work out $3\frac{1}{3} \div 2\frac{2}{9}$. Give your answer as a mixed number.

$$a) \frac{7}{8} \times \frac{32}{21} = 1\frac{1}{3}$$

$$b) \frac{10}{3} \times \frac{9}{20} = \frac{90}{60}$$

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

8 Dividing fractions: problems

- a) Write down the reciprocal of $2\frac{3}{5}$
- b) A bag holds $2\frac{1}{2}$ kg of rice. One portion is $\frac{3}{16}$ kg. How many full portions are in the bag? How much rice is left over?

$$a) \frac{5}{13} \quad b) \frac{5}{2} \times \frac{16}{3} = \frac{40}{3} = 13\frac{1}{3}$$

$$b) 13 \text{ portions, } \frac{1}{16} \text{ kg left}$$