Solutions

Marking: **M1** a correct method, **A1** the correct answer.

Each answer shows the steps, then the **result**.

2.1

- multiply numerators and denominators

$$\frac{3}{4} \times \frac{2}{9} = \frac{6}{36} = \mathbf{\frac{1}{6}}$$

2.2

- $5 \div 8 = \mathbf{0.625}$

2.3

- common denominator 12

$$\frac{10}{12} - \frac{3}{12} = \mathbf{\frac{7}{12}}$$

2.4

- $0.36 = \frac{36}{100} = \mathbf{\frac{9}{25}}$

2.5

- $\frac{7}{20} = \frac{35}{100} = \mathbf{35}\%$

3.1

- $2\frac{1}{3} = \frac{7}{3}$
- divide by multiplying by the reciprocal

$$\frac{7}{3} \times \frac{9}{7} = \frac{63}{21} = \mathbf{3}$$

3.2

- invert the second fraction and multiply

$$\frac{7}{8} \times \frac{40}{7} = \frac{280}{56} = \mathbf{5}$$

- **5 pieces**

3.3

- as decimals: 0.65, 0.666…, 0.64, 0.625
- $\mathbf{\frac{5}{8}}$**, 64%, 0.65,** $\mathbf{\frac{2}{3}}$

3.4

- $1\frac{3}{5} + 2\frac{3}{4} = \frac{8}{5} + \frac{11}{4}$
- $= \frac{32}{20} + \frac{55}{20} = \frac{87}{20}$
- $= \mathbf{4\frac{7}{20}}$

3.5

- let $x = 0.2777\ldots$; then $10x = 2.777\ldots$ and $100x = 27.777\ldots$
- subtracting: $100x - 10x = 27.777\ldots - 2.777\ldots$, so $90x = 25$
- $x = \frac{25}{90} = \mathbf{\frac{5}{18}}$