

Solutions

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

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

2.1

- multiplication before subtraction: $3 \times 4 = 12$

$$20 - 12 = \mathbf{8}$$

2.2

- improper fractions with a common denominator: $\frac{8}{3} + \frac{3}{2} = \frac{16}{6} + \frac{9}{6}$

$$= \frac{25}{6} = \mathbf{4\frac{1}{6}}$$

2.3

- a negative times a negative is positive: $-5 \times (-3) = 15$

$$15 + 2 = \mathbf{17}$$

2.4

- multiply both by 10 to clear the decimals: $12 \div 4$

$$= \mathbf{3}$$

3.1

(a)

- bracket first, then the power: $(7 - 2)^2 = 5^2 = 25$

$$25 \div 5 = \mathbf{5}$$

(b)

- improper fractions: $\frac{16}{5} \div \frac{8}{5}$
- multiply by the reciprocal: $\frac{16}{5} \times \frac{5}{8}$

$$= \frac{80}{40} = \mathbf{2}$$

3.2

- a fall of 7 means subtract: $-4 - 7$

$$= \mathbf{-11^{\circ}\text{C}}$$