

Solutions

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

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

2.1

- p.m. after midday, so add 12 to the hour

$$\mathbf{19\ 45}$$

2.2

- $18\ 40 + 2\ \text{h} = 20\ 40$, then $+35\ \text{min}$ crosses the hour

$$= \mathbf{21\ 15}$$

2.3

- $09\ 52$ to $12\ 00$ is $2\ \text{h}\ 8\ \text{min}$, then $18\ \text{minutes}$ more

$$= \mathbf{2\ h\ 26\ min}$$

2.4

- $0.25 \times 60 = 15\ \text{minutes}$

$$= \mathbf{2\ h\ 15\ min}$$

3.1

(a)

- $08\ 47$ to $09\ 23$ is $13\ \text{minutes}$ to the hour and $23\ \text{after}$

$$= \mathbf{36\ minutes}$$

(b)

- $08\ 47$ to $10\ 09$

$$= \mathbf{1\ h\ 22\ min}$$

- the 8-minute wait at B is part of the total, so do not subtract it

3.2

- convert the time: $48\ \text{min} = 48 \div 60 = 0.8\ \text{h}$, so the time is $1.8\ \text{h}$
- speed = distance $\div$ time = $135 \div 1.8$

$$= \mathbf{75\ km/h}$$