

- 1 (a) On a map, the height of Hillibar Station is 1047 m and the height of Sular Junction is 297 m.

- (i) Calculate the difference in these heights.

$$1047 - 297 = 750 \text{ m}$$

Answer(a)(i) 750 m [1]

- (ii) The temperature falls by 1°C for every 100 m increase in height.
One day the temperature in Sular Junction is 19°C .

Work out the temperature at Hillibar Station.

$$\frac{750 \text{ m}}{100 \text{ m}} \times 1^{\circ}\text{C} = 7.5^{\circ}\text{C}$$

$$19^{\circ}\text{C} - 7.5^{\circ}\text{C} = 11.5^{\circ}\text{C}$$

Answer(a)(ii) 11.5 $^{\circ}\text{C}$ [1]

- (iii) Write 297 correct to the nearest ten.

Answer(a)(iii) 300 [1]

- (iv) Write 1047 correct to the nearest hundred.

Answer(a)(iv) 1000 [1]

- (b) (i) Kim arrives at Hillibar Station at 12 35.
The taxi to her hotel takes 27 minutes.

Work out the time Kim arrives at her hotel.

$$\begin{array}{r} 12.35 \\ 00.27 + \\ \hline 12.62 \\ = 13.02 \end{array}$$

Answer(b)(i) 13.02 [1]

- (ii) Henry takes 17 minutes to walk from his home to Sular Junction.
He must arrive there by 10 43.

Work out the latest time he can leave home.

$$\begin{array}{r} 10.43 \\ 00.17 - \\ \hline 10.26 \end{array}$$

Answer(b)(ii) 10.26 [1]