

- 1 During one week in April, in Quebec, the daily minimum temperatures were

-5°C , -1°C , 3°C , 2°C , -2°C , 0°C , 6°C .

Write down

- (a) the lowest of these temperatures,

Answer(a) -5 $^{\circ}\text{C}$ [1]

- (b) the range of these temperatures.

$$6 - (-5) = 6 + 5 \\ = 11$$

Answer(b) 11 $^{\circ}\text{C}$ [1]

2

$$\sqrt{23} \quad 48\% \quad 4.80 \quad \frac{53}{11}$$

$$= 4.7958\dots \quad = 0.48 \quad = 4.8181\dots$$

Write the numbers in order of size with the **largest** first.

Answer $\frac{53}{11}$ $>$ 4.80 $>$ $\sqrt{23}$ $>$ 48% [2]

- 3 Ricardo changed \$600 into pounds (£) when the exchange rate was \$1 = £0.60.
He later changed all the pounds back into dollars when the exchange rate was \$1 = £0.72.

How many dollars did he receive?

$$\begin{aligned} \$1 &= \pounds 0.60 & \$1 &= \pounds 0.72 \\ \$600 &= x & y &= \pounds 360 \\ x &= \frac{\pounds 0.60}{\$1} \times \$600 & y &= \frac{\$1}{\pounds 0.72} \times \pounds 360 \\ &= \pounds 360 & &= \$500 \end{aligned}$$

Answer \$ 500 [2]

- 4 The maximum speed of a car is 252 km/h.

Change this speed into metres per second.

$$252 \text{ km/h} = \frac{252 \times 1000 \text{ m}}{1 \times 3600 \text{ s}} \\ = 70 \text{ m/s}$$

Answer 70 m/s [2]