m2 = 11 days to go!

19 **(a)** Calculate the circumference of a circle with diameter 2 m.

$$C = \pi d$$

Remember the "Circle Song"

$$C = \pi(2)$$

$$C =$$

Answer __6·28__ m [2]

(b) Hence calculate the perimeter of the window below, which is made up of a semicircle and a rectangle.
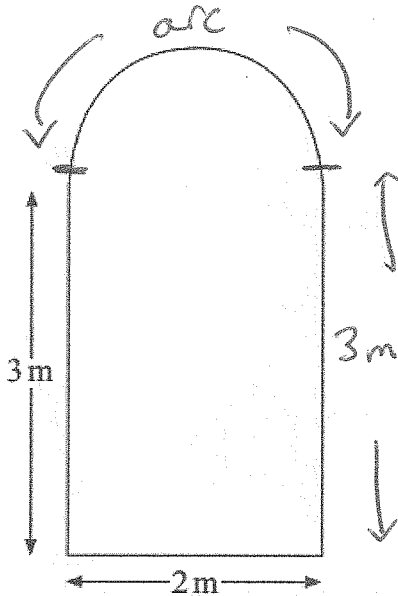

arc

3 m

3 m

2 m

diagram not
drawn accurately

Arc = Circle ÷ 2

Arc = 3·14

Perimeter = 3 + 2 + 3 + 3·14

Ans 11·1 m (1 dec. pl.)

20 A salesman recorded the average temperature (°C) and his ice-cream sales (£) during
    8 weeks of the summer.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Average Temperature (°C)	13	12	14	16	14	18	17	18
Sales (£)	238	206	264	330	272	398	364	392

(a) The first three points have already been plotted.
     Use the data to complete the scatter graph.   [2]

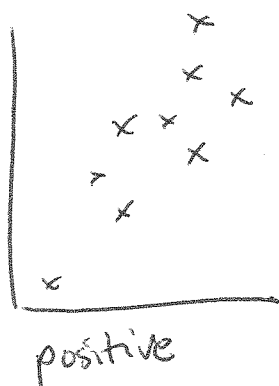(b) Draw the line of best fit. *use a ruler*   [1]

(c) In Week 9 the average temperature was 15 °C.
     Use the graph to estimate the sales for Week 9

                                        Answer £ __298__ [1]

(d) What type of correlation does your graph show?
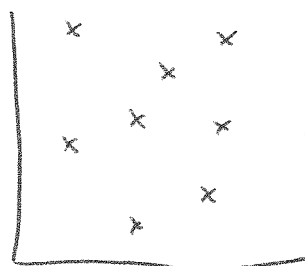
                                        Answer __Positive__ [1]

positive — as one thing goes up so does the other.

negative — as one thing goes up then the other goes down

↑ Each ☐ is 2

no correlation