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

Answer _____ m [2]

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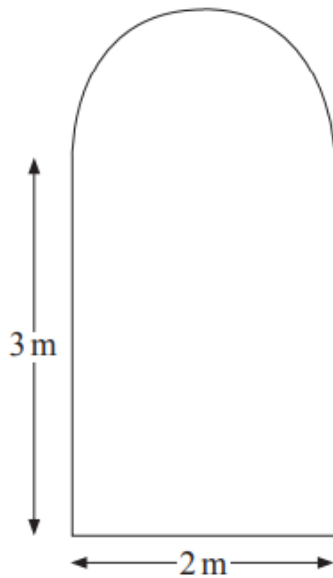

3 m

—2 m—

diagram not
drawn accurately

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. [1]

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

Answer £ _____ [1]

(d) What type of correlation does your graph show?

Answer _____ [1]