

Ex 8 Charts and Graphs*Section A (Non-calculator)*

- 1 Evaluate –
- a) $\frac{x^2 - y^2}{3z}$ where $x = -4$, $y = 3$ and $z = -2$
- b) $0.0344 \div 40$
- c) $\frac{3}{5} + \frac{2}{7}$

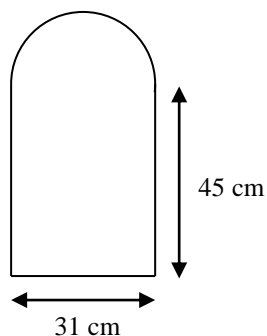
*Section B (Knowledge)***Only use your calculator if you need to!**

- 2 The number of passengers travelling by bus from Edinburgh to Glasgow was recorded for 20 journeys.
- 34 23 17 24 39 31 48
14 38 41 27 36 45 29
36 32 12 42 38 29
- a) Display the information in an ordered stem and leaf diagram.
- b) Find the median number of passengers.
- 3 The contents of 20 matchboxes were counted.
- 44 46 45 47 48 47 41 48 45 44
45 44 42 43 44 46 46 43 49 45
- a) Construct a dot plot for the data.
- b) Describe the shape of the distribution.
- c) What would you expect the “average contents per matchbox” to be?
- 4 For the following set of data construct a scattergraph, show a line of best fit.

Age (years)	1	2	3	4	5	6	7	8
Height (m)	4	5	6	10	10	14	16	16

Section C (Mixed)

- 5 The opening of a fireplace, shown in the diagram below, consists of a rectangle and a semi-circle.



A metal strip is to be placed around the fireplace opening.
Calculate the length of the metal strip.