

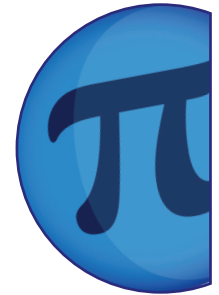


Histograms: Snapshot

NAME:

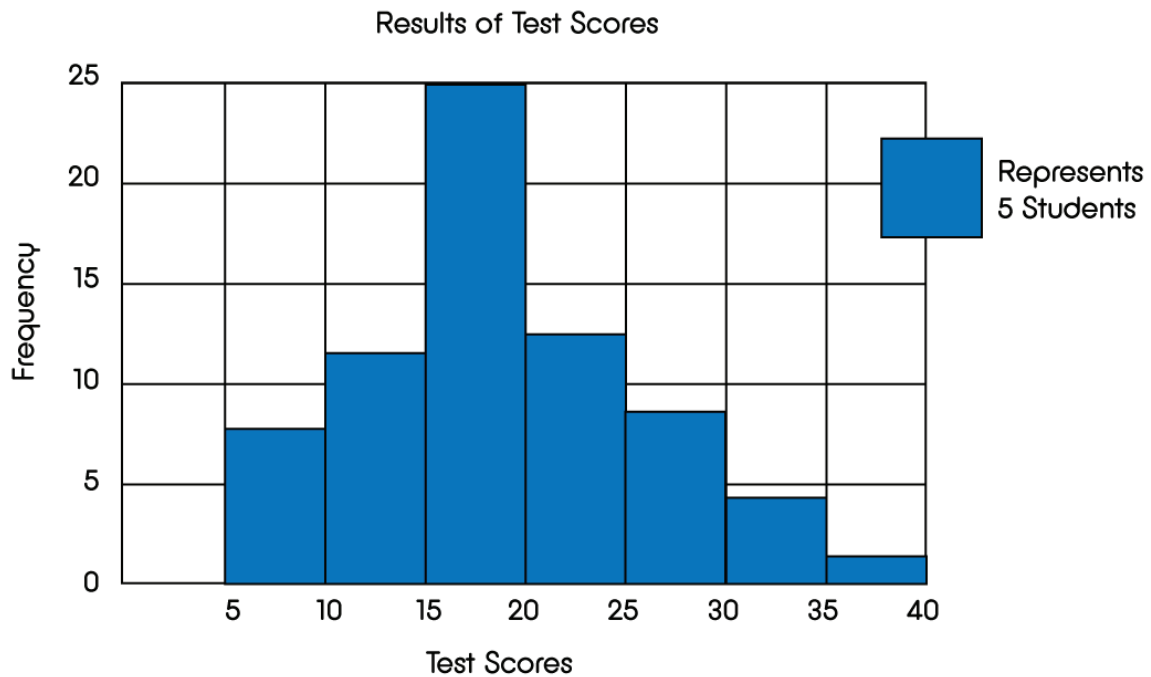
CLASS:

DATE:



Basic

1) Answer the following questions about the histogram below:



a) How many students received a test score between 30 and 35?

b) How many students received a test score between 15 and 20?



Histograms: Snapshot

Basic

2) Draw a histogram of the following data, which shows the width of various letters in a mailing office.

Width of letter (cm)	10-15	15-20	20-25	25-30	30-35	35-40
Frequency (no. of letters)	27	35	16	10	8	3

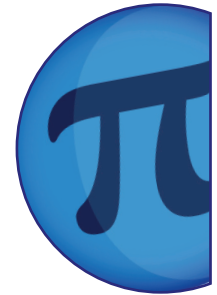


Histograms: Snapshot

NAME:

CLASS:

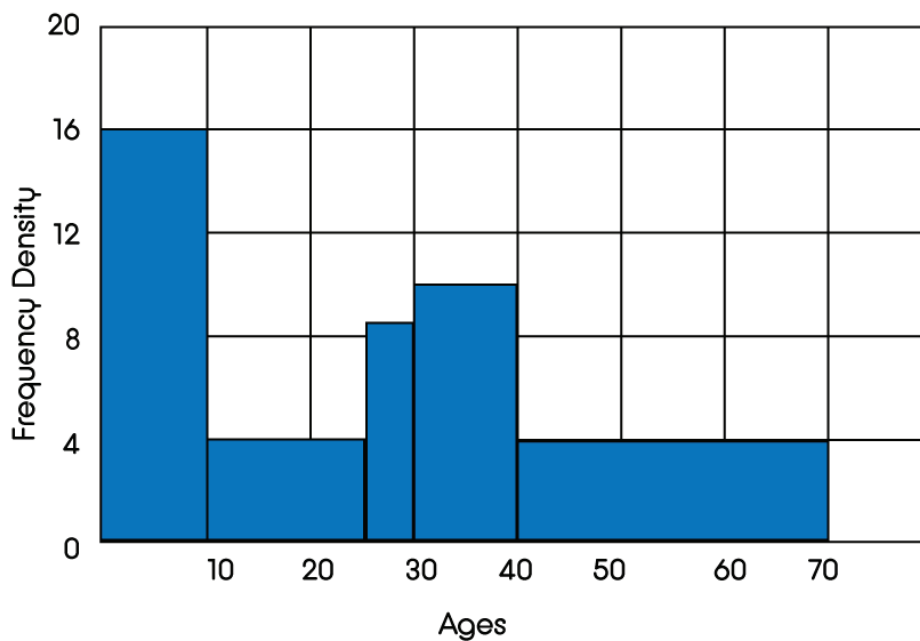
DATE:



Core

1) The following histogram gives some information about the ages of the people who live in a particular town.

Ages of People in Town



Use the information from the histogram to complete the following frequency table:

Age (x) in years	Frequency
$0 < x \leq 10$	160
$10 < x \leq 25$	
$25 < x \leq 30$	
$31 < x \leq 40$	100
$40 < x \leq 70$	120



Histograms: Snapshot

Core

2) Draw a histogram for the following data:

Price range (£)	20-40k	40-60k	60-100k	100-140k	140-200k
Number of houses	15	27	50	35	22

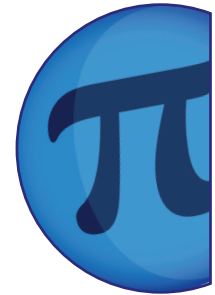


Histograms: Snapshot

NAME:

CLASS:

DATE:



Advanced

1) On holiday, Jessica hires some roller skates. The table below shows the cost.

Number of days (n)	1	2	3	4	5
Cost (£ C)	8	16	24	32	40

- Explain why you know that the cost varies directly with the number of days.
- Find a formula to get C when you know n .
- Use your formula to calculate the cost of 9 days' hire.

2) Triangles of different heights (h) are drawn on the same base XY . The area is calculated.

Height (cm)	1	2	3	4	5
Area (cm ²)	2	4	6	8	10

a) Draw a graph to illustrate the table.

b) Are the area and height in direct proportion? Give two reasons for your answer.

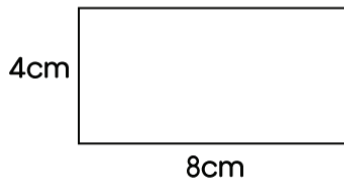


Histograms: Snapshot

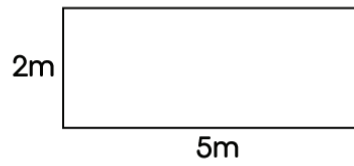
Advanced

3) Find the areas of the following shapes:

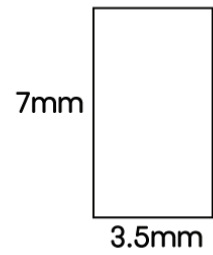
a)



b)



c)





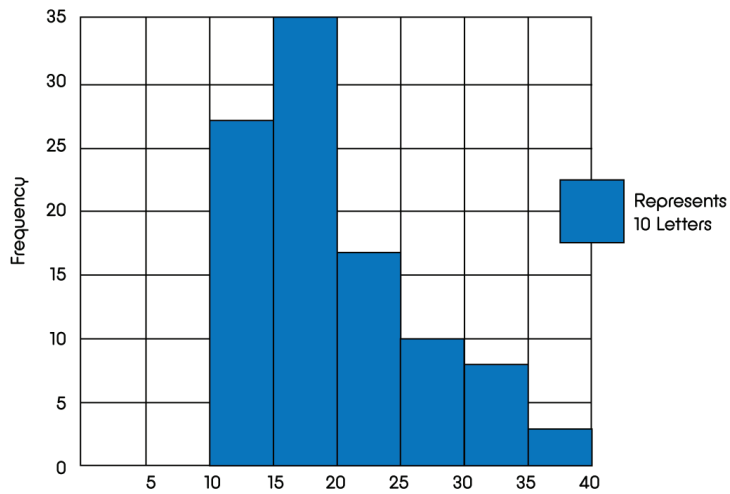
Histograms: Snapshot

ANSWERS

Basic

1) a) 4 b) 25

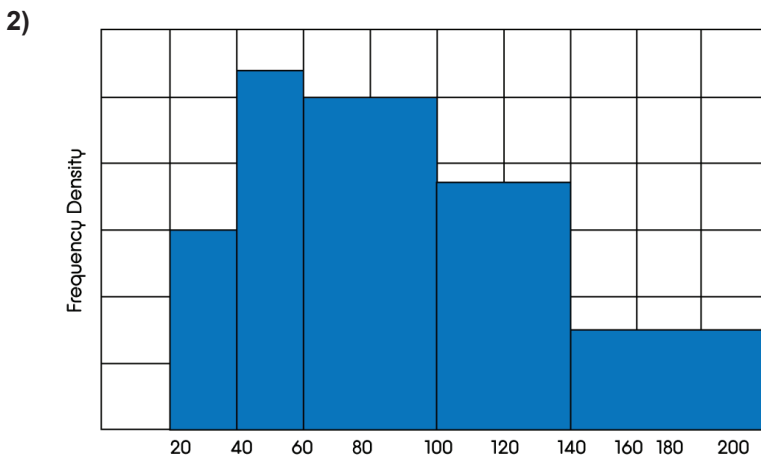
2) Letter Width Analysis



Core

1)

Age (x) in years	Frequency
$0 < x \leq 10$	160
$10 < x \leq 25$	60
$25 < x \leq 30$	40
$31 < x \leq 40$	100
$40 < x \leq 70$	120





Histograms: Snapshot

ANSWERS

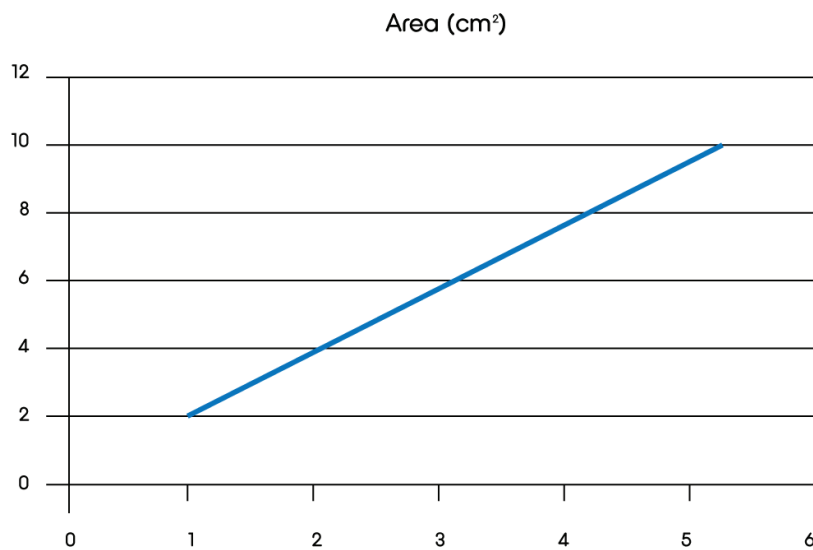
Advanced

1) a) The cost per day is the same, a multiple of 8.

b) $C = 8n$

c) $C = 8 \times 9 = \text{£}72$

2) a)



b) Yes, as it is a straight line and if extended it passes through the origin.

3) a) 32cm²

b) 10m²

c) 24.5mm²