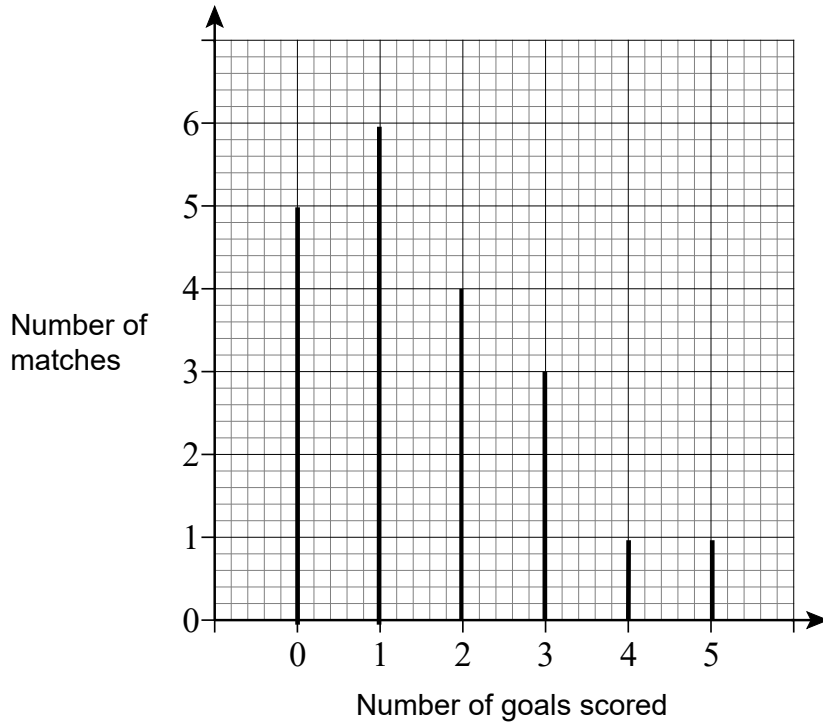


# Topic Test 1 (20 minutes)

## Collecting and representing data - Higher

1 The diagram shows the number of goals scored by a team with their old manager.



The team had a new manager for the last few matches of the season. They scored 40 goals over the whole season of 24 matches.

How many goals per match did they score on average with the new manager?

**[4 marks]**

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Answer \_\_\_\_\_

2 Jess measures the height of each student in her year.

2 (a) Which **two** words describe the data she collects?

Circle your answers.

[2 marks]

Primary

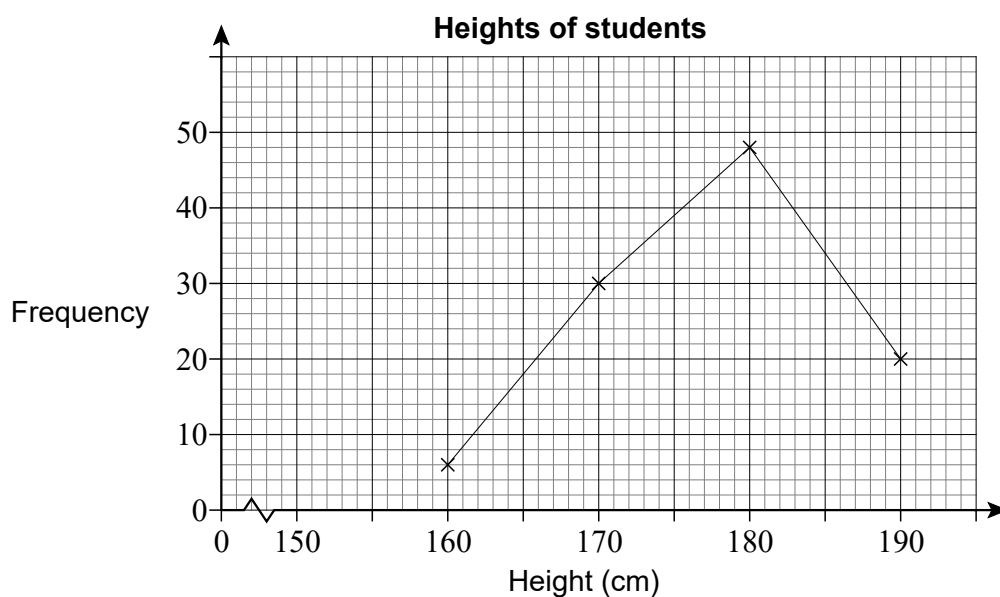
Secondary

Discrete

Continuous

2 (b) Jess records the data in this table and draws a frequency polygon.

Height, $h$ (cm)	Frequency
$150 \leq h < 160$	6
$160 \leq h < 170$	30
$170 \leq h < 180$	44
$180 \leq h < 190$	20



Write down two mistakes that she has made.

[2 marks]

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3 The table shows information about the distances travelled to make 500 deliveries.

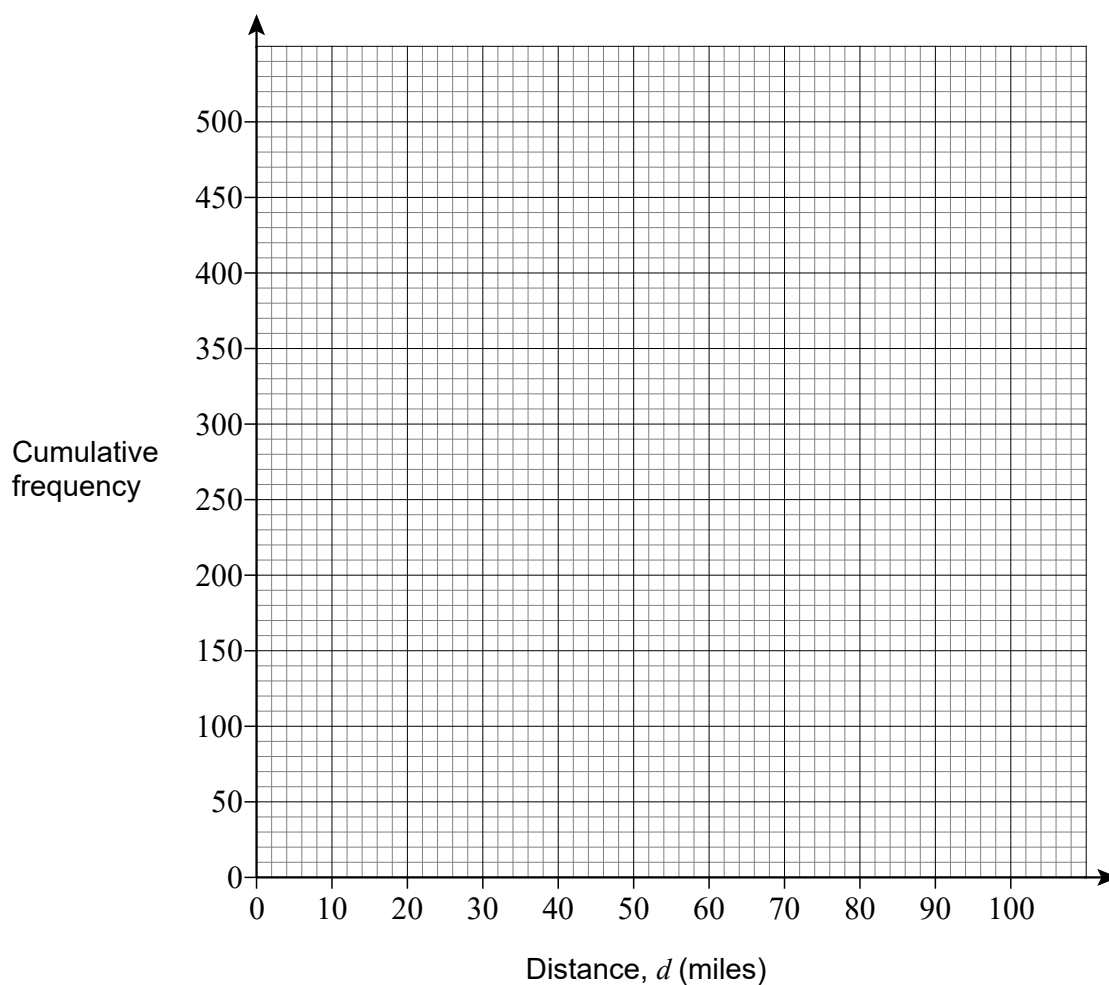
Distance, $d$ (miles)	Frequency	Cumulative frequency
$0 < d \leq 10$	0	0
$10 < d \leq 40$	60	60
$40 < d \leq 60$	240	
$60 < d \leq 80$	125	
$80 < d \leq 100$	75	

3 (a) Complete the cumulative frequency column.

[1 mark]

3 (b) Show the information on a cumulative frequency graph.

[3 marks]

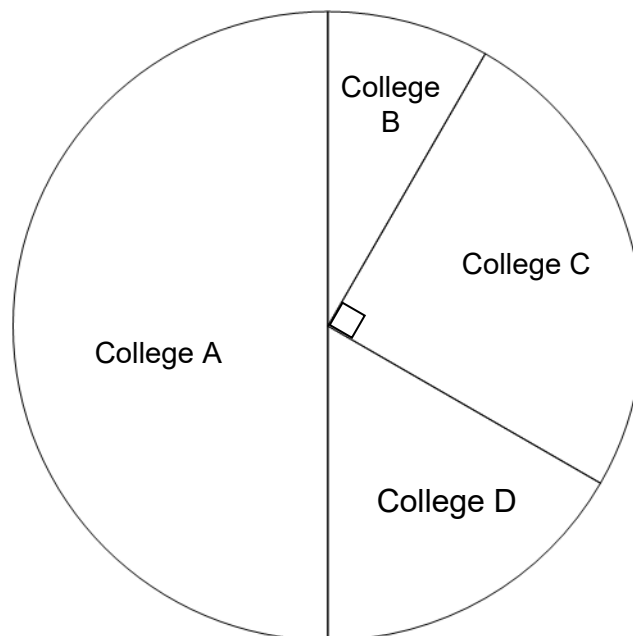


- 3 (c) Deliveries under  $x$  miles are free.  
50 of the deliveries were free.  
Use your graph to estimate  $x$ .

[1 mark]

Answer \_\_\_\_\_

- 4 The pie chart shows information about the number of students attending four colleges.



1200 students attend College D.

Altogether, how many students attend all the colleges?

[3 marks]

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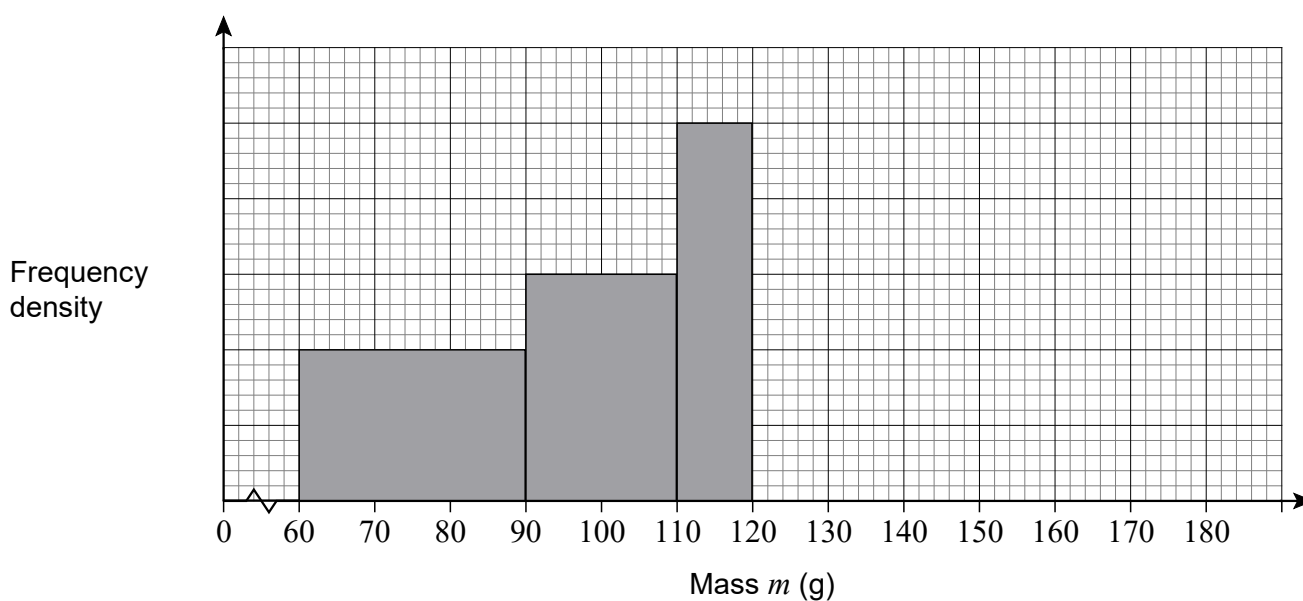
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Answer \_\_\_\_\_

5 The table and histogram give some information about the masses of 600 hamsters.

Mass, $m$ (g)	Frequency
$60 < m \leq 90$	120
$90 < m \leq 110$	
$110 < m \leq 120$	
$120 < m \leq 140$	180
$140 < m \leq 180$	80
	Total = 600



Complete the table and the histogram.

[4 marks]