

Name:

Exam Style Questions

Vertical Line Charts



Equipment needed: Ruler, calculator, pencil and pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 148c



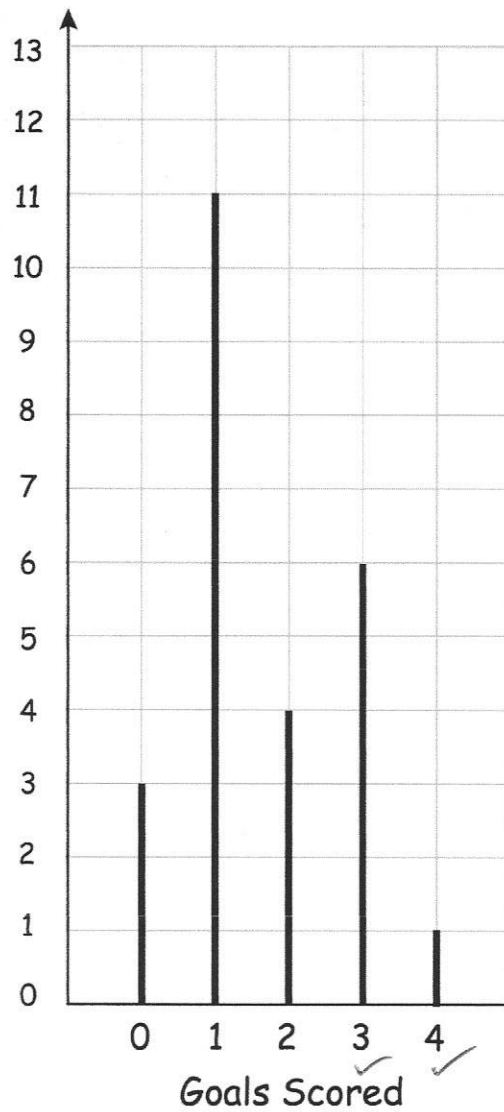
Answers and Video Solutions



1. The chart shows the number of goals scored by Finn in 25 football matches.



Number of
Matches



(a) How many times did Finn score no goals?

3
.....
(1)

(a) How many times did Finn score more than 2 goals?

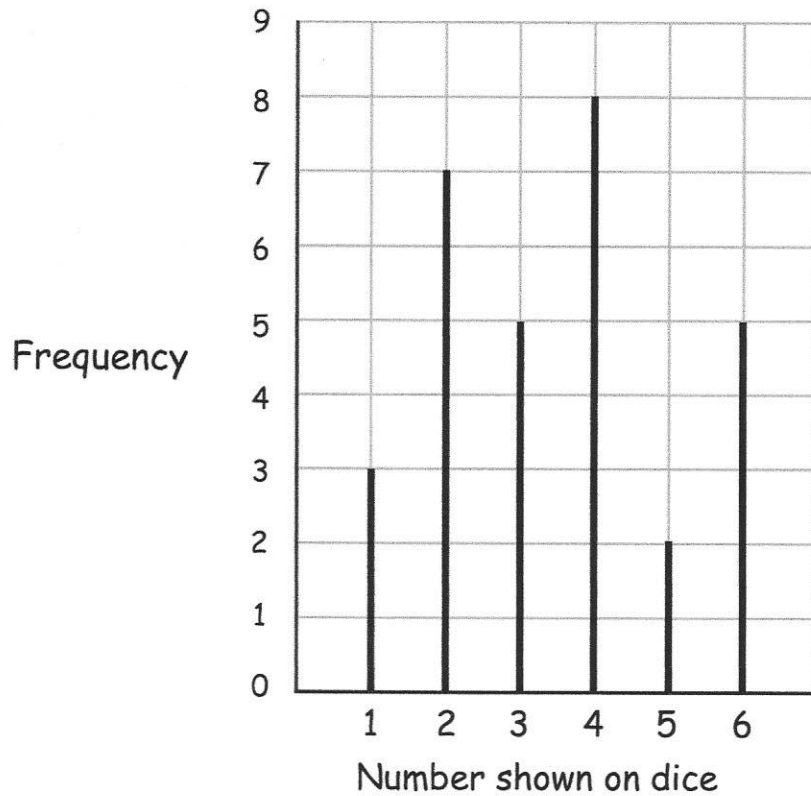
$$6 + 1 = 7$$

7
.....
(1)

2. Scarlett rolls an ordinary dice 30 times.



The chart shows the results.



(a) How many times was the number shown on a dice, a 5?

..... 2

(1)

(a) Which number was shown on the dice a total of 7 times?

..... 2

(1)

(b) Which two numbers were shown on the dice the same number of times?

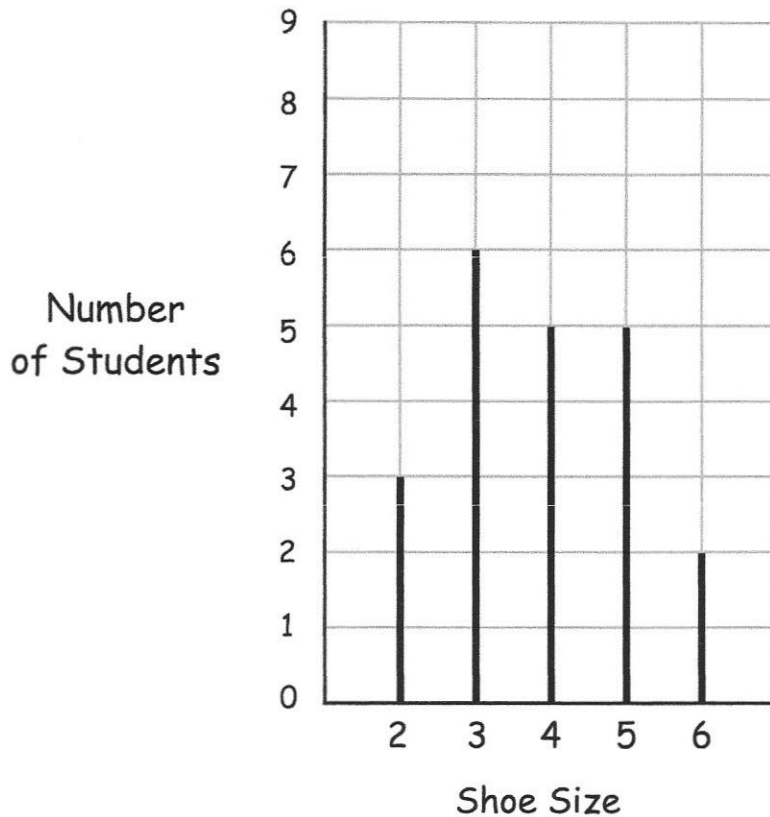
..... 3 and 6

(1)

3. Mrs Thomas asked the all the students in her class their shoe size.



The vertical line chart shows the results.



(a) How many students have a shoe size of 4?

$$\begin{array}{r} 5 \\ \hline \end{array} \quad (1)$$

(b) Which shoe size is the mode?

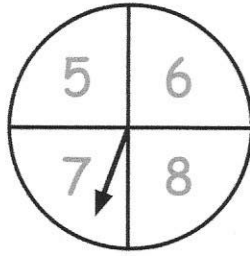
$$\begin{array}{r} 3 \\ \hline \end{array} \quad (1)$$

(c) How many students are in the class?

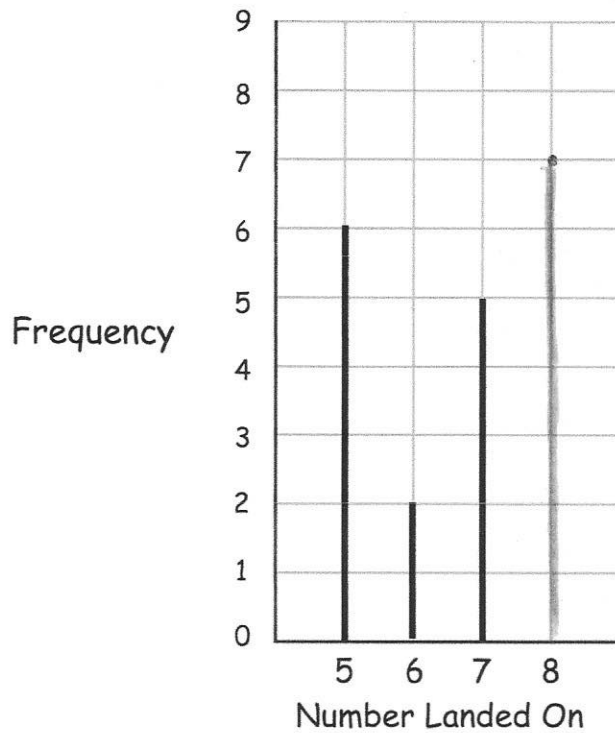
$$3 + 6 + 5 + 5 + 2 = 21$$

$$\begin{array}{r} 21 \\ \hline \end{array} \quad (2)$$

4. Rebecca spins the spinner below 20 times.



Rebecca then draws a chart to show some of the results. The chart is incomplete.



Complete the chart.

$$6 + 2 + 5 = 13$$

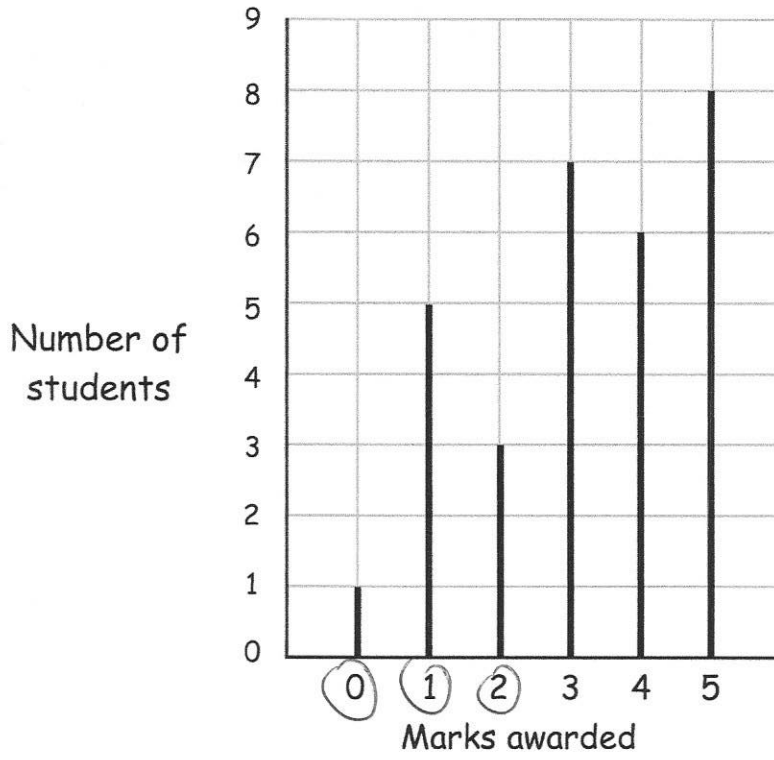
$$20 - 13 = 7$$

(3)

5. A class of students attempt an examination question.
The question is worth 5 marks.



The vertical line chart shows information about the marks awarded.



- (a) Write down the modal number of marks awarded.

5
.....
(1)

The teacher chooses one of the students at random from the class.

- (b) Write down the probability that the student scored less than 3 marks.

$$1 + 5 + 3 + 7 + 6 + 8 = 30$$

less than 3 : 0, 1, 2

$$1 + 5 + 3 = 9$$
$$\frac{9}{30} = \frac{3}{10}$$

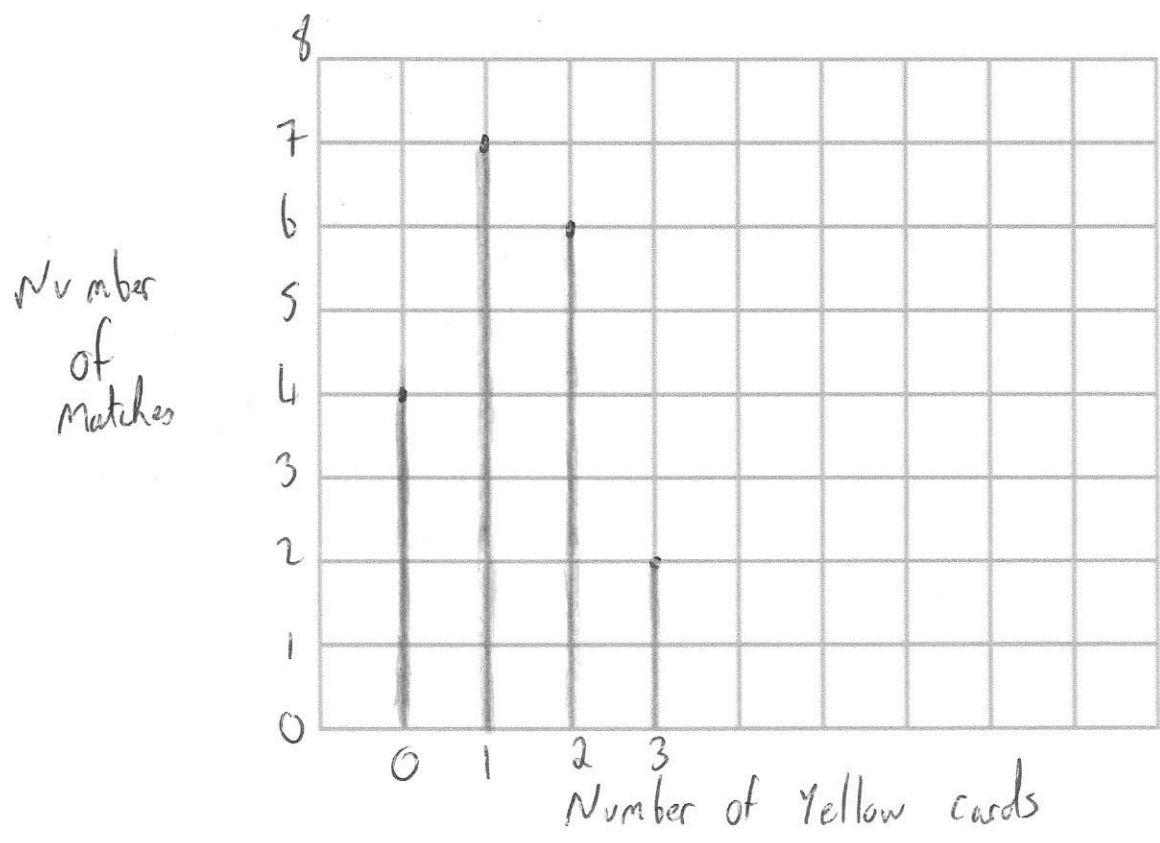
.....
(2)

6. A football manager recorded the number of yellow cards his team received during each match one season.



Number of Yellow Cards	Number of Matches
0	4
1	7
2	6
3	2

Draw a vertical line chart to show this information.

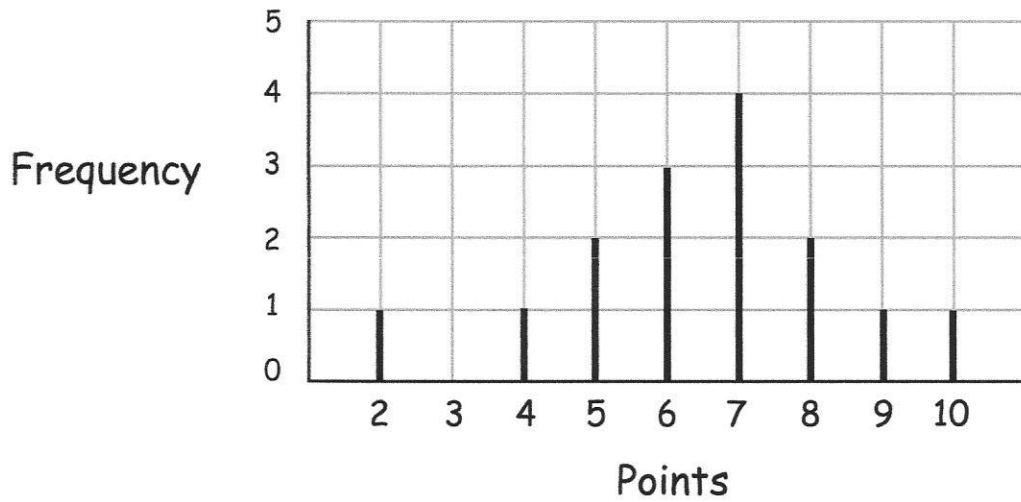


(3)

7. 15 contestants take part in a talent show.



The chart shows information about the number of points they scored.



(a) Work out the range of the points scored.

$$10 - 2 = 8$$

8

.....
(2)

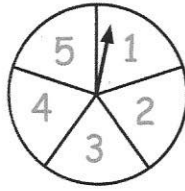
(b) Work out the median number of points scored.

2 4 5 6 6 6 7 7 7 7 8 8 9 10

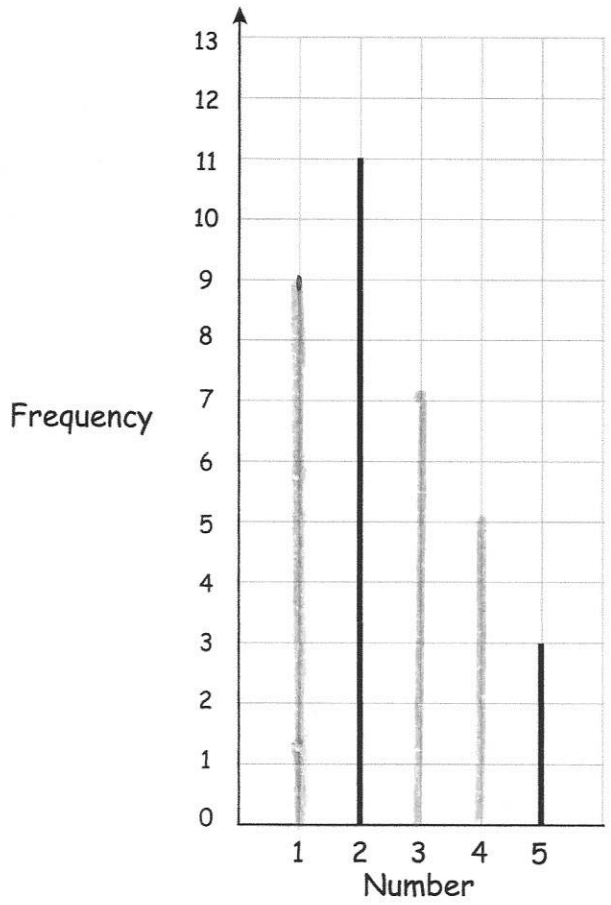
7

.....
(2)

8. Tomas spins a spinner with 5 sections a number of times.



The chart shows information about the number of times it lands on a 2 and a 5.



Tomas says the number 1 occurred three times as many times as the number 5.

He says the number 3 occurred two more times than the number 4.

Tomas says he spun the spinner a total of 35 times.

Complete the chart.

$$3 \times 3 = 9 \text{ (number 1)}$$

$$9 + 11 + 3 = 23$$

$$35 - 23 = 12$$

$$5 + 7 = 12$$

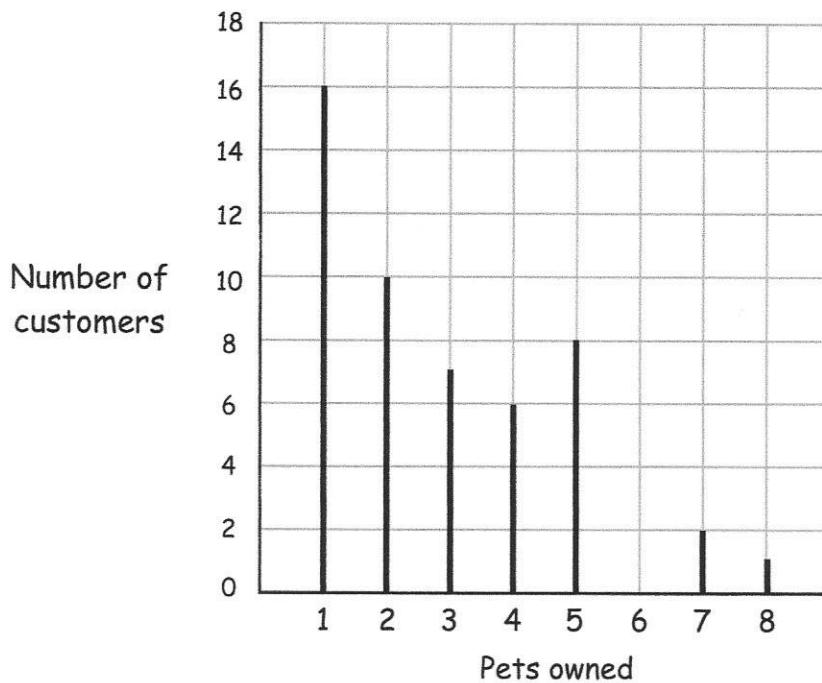
$$(4) \quad (3)$$

(5)

9. A vet asked some of his customers how many pets they own.



The chart shows the results.



(a) Write down the modal number of pets owned.

1
.....
(1)

(b) Work out the mean number of pets owned.

Pets owned	frequency	fx
1	16	16
2	10	20
3	7	21
4	6	24
5	8	40
6	0	0
7	2	14
8	1	8
	\pm 50	\pm 143

$$143 \div 50 = 2.86$$

2.86
.....
(3)