

Name:

Exam Style Questions

Mode: Frequency Table

Range: Frequency Table



Corbettmaths

Equipment needed: Pen, Calculator

#### 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](http://www.corbettmaths.com/contents)



Videos 56a, 57a

Answers and Video Solutions



1. Josie asks her friends to choose their favourite colour.  
Here are the results.



Red	Blue	Yellow	Red	Blue
Yellow	Red	Red	Red	Red
Orange	Blue	Yellow	Red	Red

(a) Complete the tally chart and frequency column to show these results.

Colour	Tally	Frequency
Blue		
Orange		
Red		
Yellow		

(2)

(b) Which colour is the mode?

(1)

2. A teacher asks the students in his class how they travel to school.  
The table shows the results.



Method	Frequency
Bicycle	3
Bus	9
Car	8
Walk	6

Write down the method of travel that is the mode.

(1)

3. Molly rolls a dice 100 times.

 She records the number shown on the dice and here are her results.

Number on Dice	Frequency
1	18
2	15
3	16
4	19
5	15
6	17

Write down the modal number shown on the dice.

.....  
(1)

4. Noel records the number of oranges in 30 punnets.

 The table shows his results.

Number of Oranges	Frequency
8	3
9	15
10	11
11	1

Work out the range of the number of oranges in the punnets.

.....  
(1)

5. A charity receives a number of donations on their website.  
The shows information about the donations received.



Donation	Frequency
£5	35
£10	58
£15	47
£20	61
£25	30
£30	54

Henry says the mode of the donations is £10

Is Henry correct?  
Explain your answer.

.....

.....

.....

(1)

6. Edward works in a shop.

He records the number of items bought by the first 40 customers.



Items Bought	Frequency
1	9
2	14
3	8
4	5
5	3
6	1

(a) Find the mode.

.....  
(1)

(b) Work out the range.

.....  
(1)

(c) Work out the total number of items bought by the 40 customers.

.....  
(2)

7. The first sentence of a story contains 22 words.  
The table shows the number of letters in each word.



Number of Letters	Frequency
2	3
3	4
4	7
5	3
6	3
7	2

(a) Find the mode.

.....  
(1)

(b) Work out the range.

.....  
(1)

The next word in the story has 8 letters.

(c) Circle how this will affect the mode and the range.

The mode will      increase      decrease      remain the same

The range will      increase      decrease      remain the same

(2)

8. The table shows the heights of the students in a class.



Height, h cm	Frequency
$150 < h \leq 155$	2
$155 < h \leq 160$	13
$160 < h \leq 165$	11
$165 < h \leq 170$	4
$170 < h \leq 175$	1

Write down the modal class interval.

.....  
(1)

9. The time taken to deliver orders from a restaurant were recorded over a weekend.



Time, t minutes	Frequency
$0 < t \leq 10$	1
$10 < t \leq 20$	7
$20 < t \leq 30$	24
$30 < t \leq 40$	29
$40 < t \leq 50$	11

Write down the modal class interval.

.....  
(1)

10. The ages of a company's employees are shown in the table below.



Age, $x$ years	Frequency
$20 < x \leq 30$	72
$30 < x \leq 40$	50
$40 < x \leq 50$	54
$50 < x \leq 60$	44
$60 < x \leq 70$	29

(a) Write down the modal class interval.

.....  
**(1)**

(b) Find the fraction of employees that are over 50 years old.

.....  
**(2)**