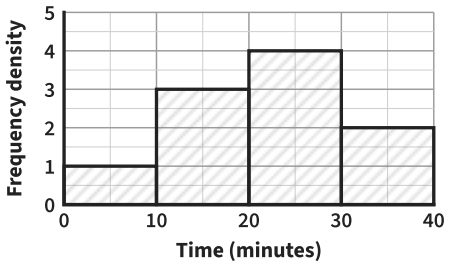
Reading histograms

ANSWERS

1

Find the frequency for $10 < t \leq 20$.



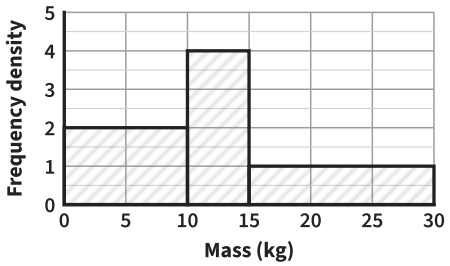
Class	Class width	Frequency density	Frequency
$10 < t \leq 20$	10	3	30

30

Answer

2

Find the frequency for $15 < m \leq 30$.



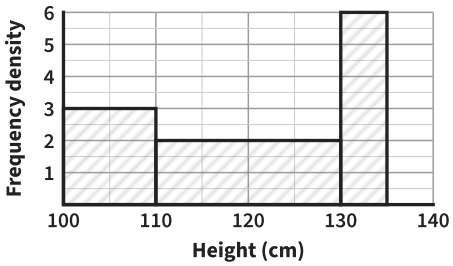
Class	Class width	Frequency density	Frequency
$15 < m \leq 30$	15	1	15

15

Answer

3

Find the frequency for $110 < h \leq 130$.



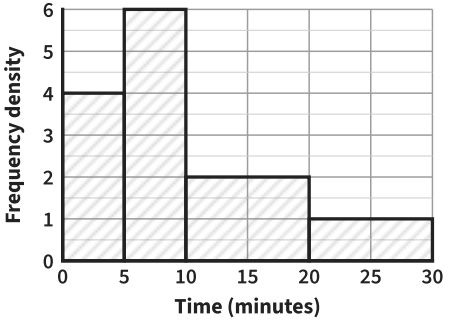
Class	Class width	Frequency density	Frequency
$110 < h \leq 130$	20	2	40

40

Answer

4

How many values are there altogether?



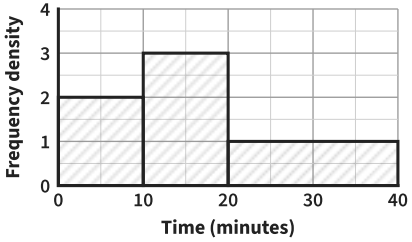
20 + 30 + 20 + 10

80

Answer

5

Estimate how many values are between 15 and 30.



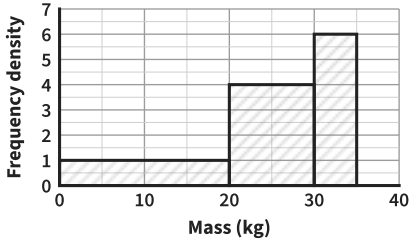
Class	Class width	Frequency density	Frequency
$15 < t \leq 20$	5	3	15
$20 < t \leq 30$	10	1	10

25

Answer

6

Estimate how many values are between 10 and 25.



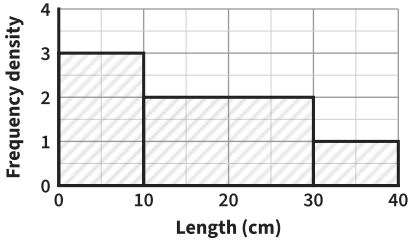
Class	Class width	Frequency density	Frequency
$10 < m \leq 20$	10	1	10
$20 < m \leq 25$	5	4	20

30

Answer

7

Estimate how many values are more than 20.



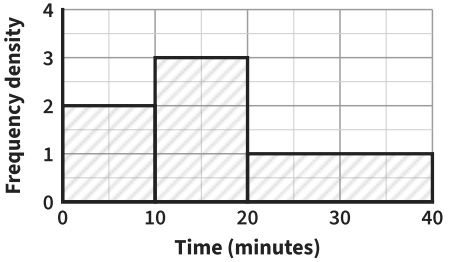
Class	Class width	Frequency density	Frequency
$20 < l \leq 30$	10	2	20
$30 < l \leq 40$	10	1	10

30

Answer

8

Zoe estimates that 3 values are between 10 and 15, from the height of the bar. Explain her mistake.



3 is the frequency density, not the frequency

5 × 3 = 15

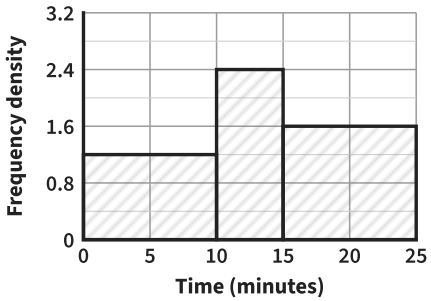
Answer

Reading histograms *further practice*

ANSWERS

9

Find the frequency for $10 < t \leq 15$.



5 × 2.4

12

Answer

10

How many values are in the histogram in question 9 altogether?

12 + 12 + 16

40

Answer

11

Estimate how many values in question 9 are more than 20.

5 × 1.6

8

Answer

12

Two classes both have a frequency of 20.
One is 10 wide and one is 4 wide.
How tall is each bar?

20 ÷ 10 = 2

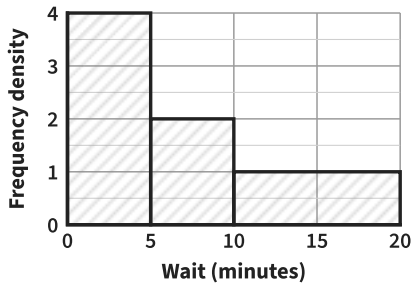
20 ÷ 4 = 5

2 and 5

Answer

13

The histogram shows how long callers waited on a phone line. What fraction of the callers waited more than 10 minutes?



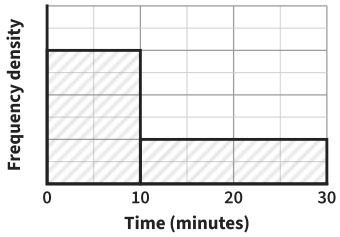
20 + 10 + 10 = 40

10 out of 40, ¼

Answer

14

The bar for $0 < t \leq 10$ stands for 30 people. How many people does the bar for $10 < t \leq 30$ stand for?



12 squares are 30 people

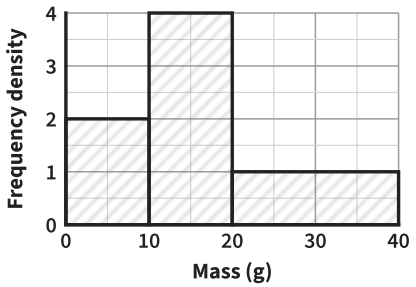
so 8 squares are 20

20

Answer

15

Estimate how many values are between 5 and 25.



10 + 40 + 5

55

Answer

16

What have you assumed in question 15?

the values are spread evenly in each class

spread evenly

Answer