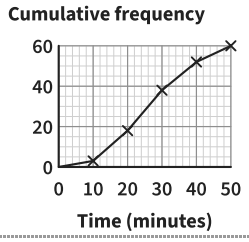
Median and quartiles from a graph

Exit ticket ANSWERS Name _____

1. The graph shows the times of 60 people. How far up the cumulative frequency axis do you go to find the median?

30

2. Find the median time.



26 minutes

3. Find the interquartile range.

35 – 18 = 17 minutes

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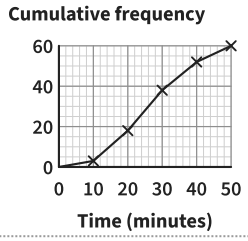

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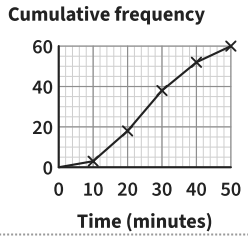

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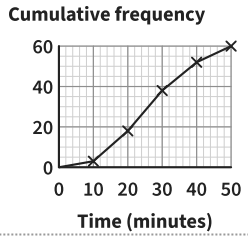

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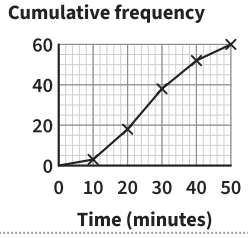

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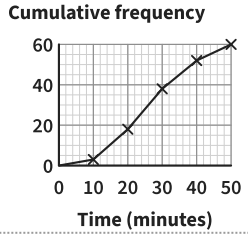

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Exit ticket Median and quartiles from a graph

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TESTS Where the median is: half of the total frequency

LOOK FOR

60 the total, not half of it

25 halfway along the time axis: go up the cumulative frequency axis

FIX IT

There are 80 values. How far up the cumulative frequency axis do you go for the median? And for the upper quartile? *40; 60*

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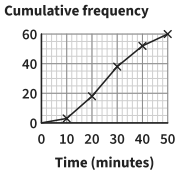
2 **Find the median time.**



26 minutes

TESTS Reading the median: across from 30, then down

LOOK FOR

25 minutes halfway along the time axis, not halfway up the cumulative frequency axis

28 read up from 25 and across: a cumulative frequency, not a time

FIX IT

80 values: points (0, 0), (20, 10), (40, 30), (60, 70), (80, 80) joined with straight lines. Estimate the median. *45*

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3 **Find the interquartile range.**

35 – 18 = 17 minutes

TESTS The quartiles and the interquartile range

LOOK FOR

35 the upper quartile on its own: take away the lower quartile

9 the median take away the lower quartile, not the upper quartile take away the lower

FIX IT

The lower quartile is 32 and the upper quartile is 51. Find the interquartile range. *19*