

Mathematics

Comparing Data

Mr Millar



Connect



Tim is deciding which bus to use to get to school, the 42 or 61.

He takes a sample of the time it takes (in minutes) for each bus to get to school

42 bus: 20, 22, 20, 21, 23, 20

61 bus: 10, 8, 40, 12, 6, 44

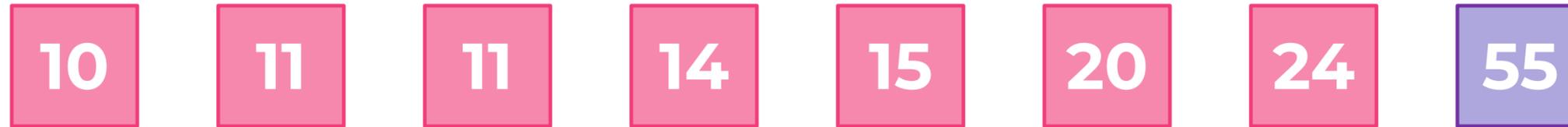
Find the mean and range of each.

Which bus would you recommend he take?



Independent task

Find the mean, median, mode and range of these cards.



(without the 55)
Mean

Median

Mode

Range

(with the 55)
Mean

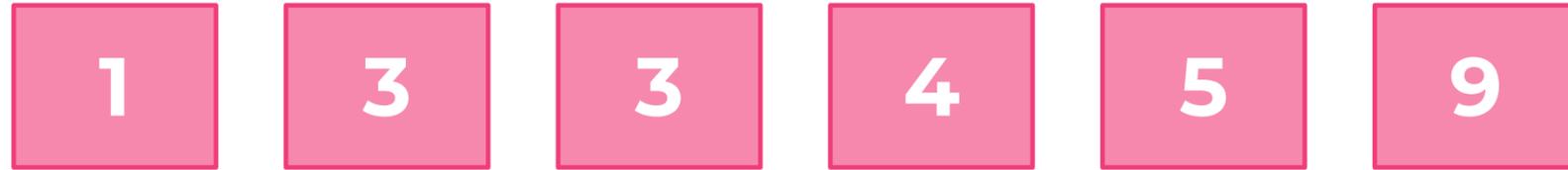
Median

Mode

Range



Explore



Change ONE of the numbers to:

- Make the mode 5
- Make the median 3
- Make the range 4
- Make the mean 5 and keep the range 8



Answers



Connect



Tim is deciding which bus to use to get to school, the 42 or 61.

He takes a sample of the time it takes (in minutes) for each bus to get to school

42 bus: 20, 22, 20, 21, 23, 20

Mean: 21 minutes. Range: 3 minutes

61 bus: 10, 8, 40, 12, 6, 44

Mean: 20 minutes. Range: 38 minutes

Find the mean and range of each.

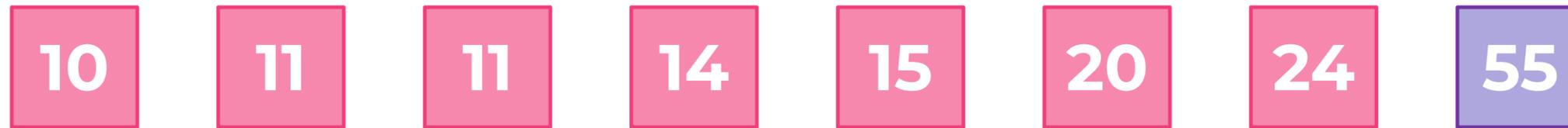
Which bus would you recommend he take?

Although the 61 bus has a lower mean (which means on average it is quicker), the 42 bus has a much lower range which means it is more consistent and reliable



Independent task

Find the mean, median, mode and range of these cards.



(without the 55)

Mean 15

Median 14

Mode 11

Range 14

(with the 55)

Mean 20

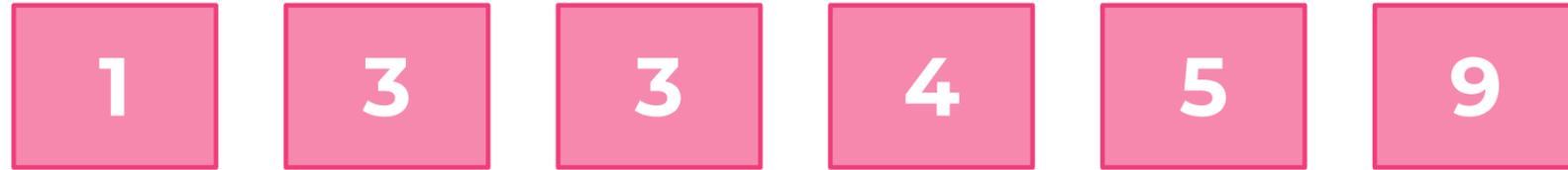
Median 14.5

Mode 11

Range 45



Explore



Change ONE of the numbers to:

- Make the mode 5 Change a 3 to a 5
- Make the median 3 Change the 4 to a 3
- Make the range 4 Change the 9 to eg a 5
- Make the mean 5 and keep the range 8
Eg Change the 4 to an 8

