

Mathematics

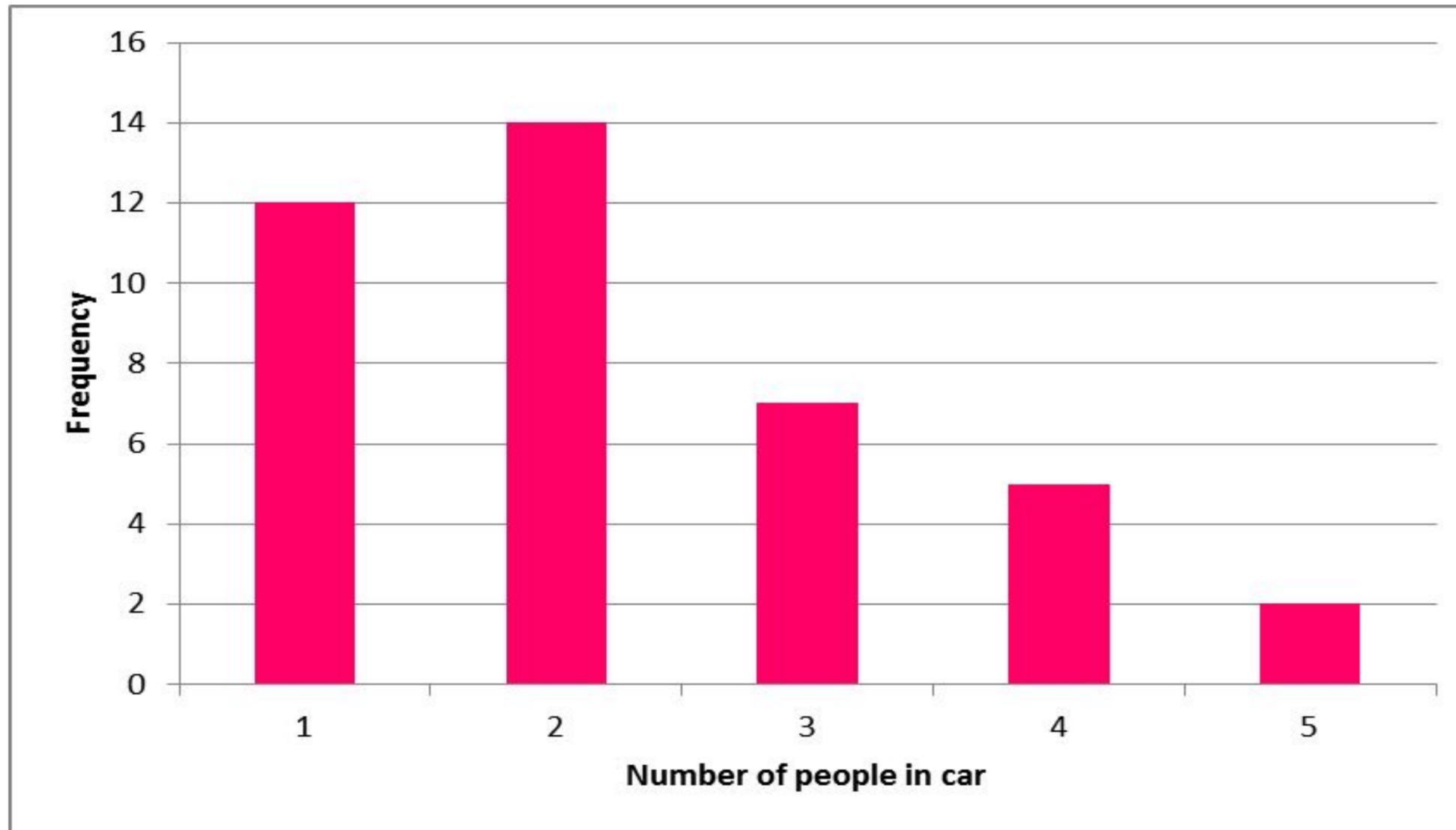
Interpreting Bar Charts

Mr Millar



Try this

Jonah counted the number of people in each car passing his school over a 1 hour period. He puts his results in a bar chart. Complete the frequency table and state the mode and range.



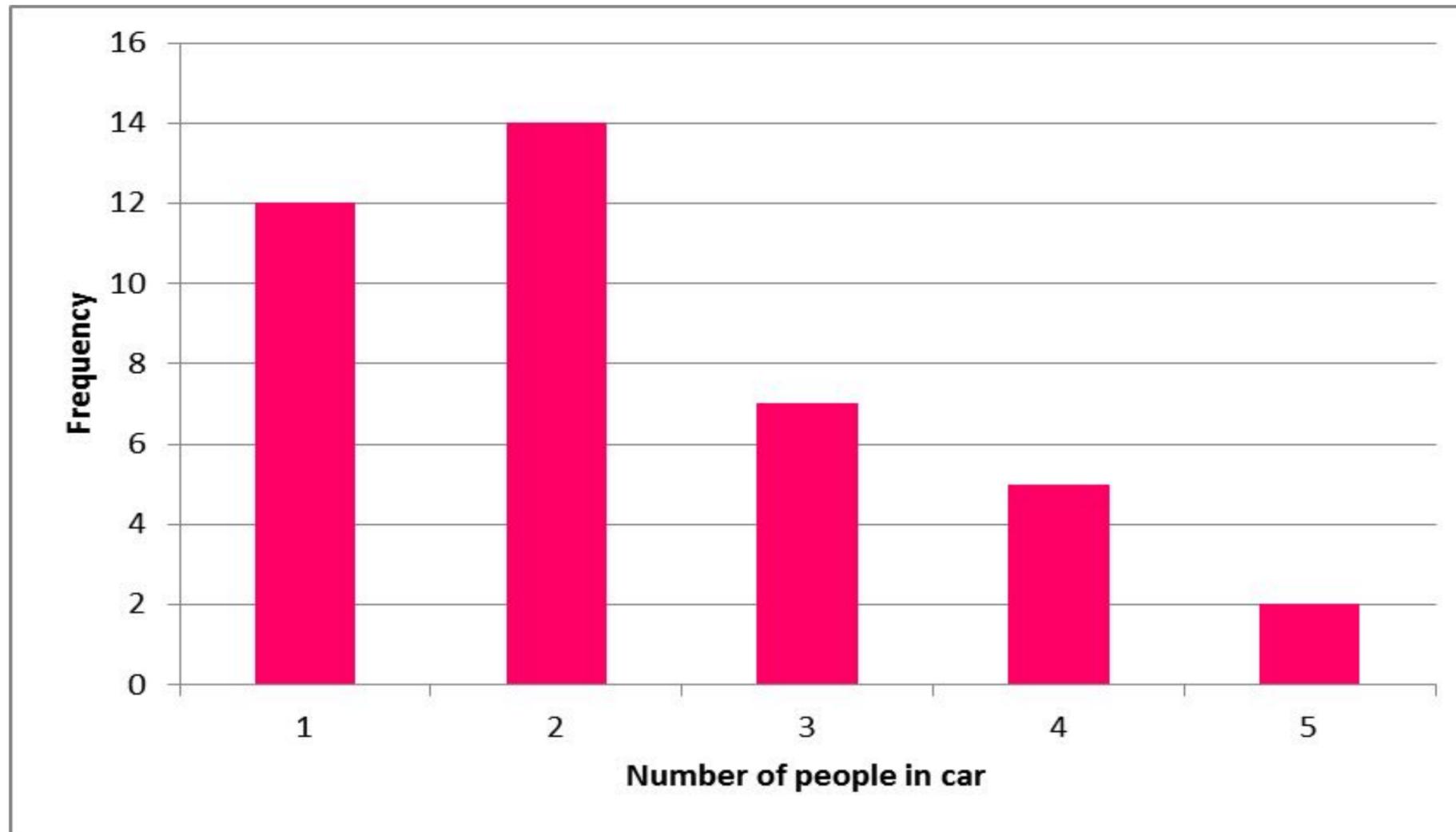
Number of
people in car

Frequency



Connect

Find the mean and median from the bar chart



Number of
people in car

1
2
3
4
5

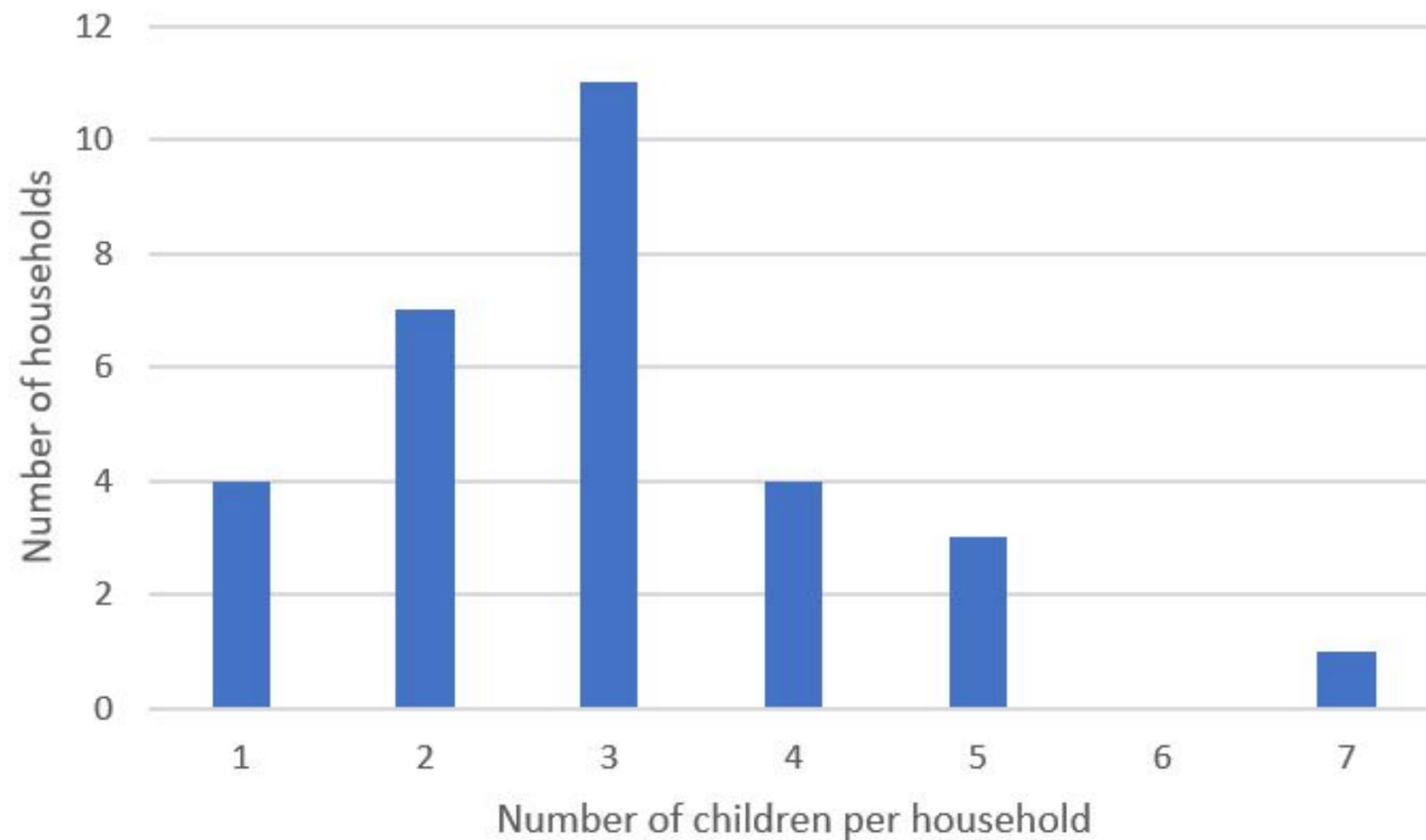
Frequency

12
14
7
5
2



Independent task

Find the mean, range, mode and median from this bar chart.
Put the data into a frequency table first.



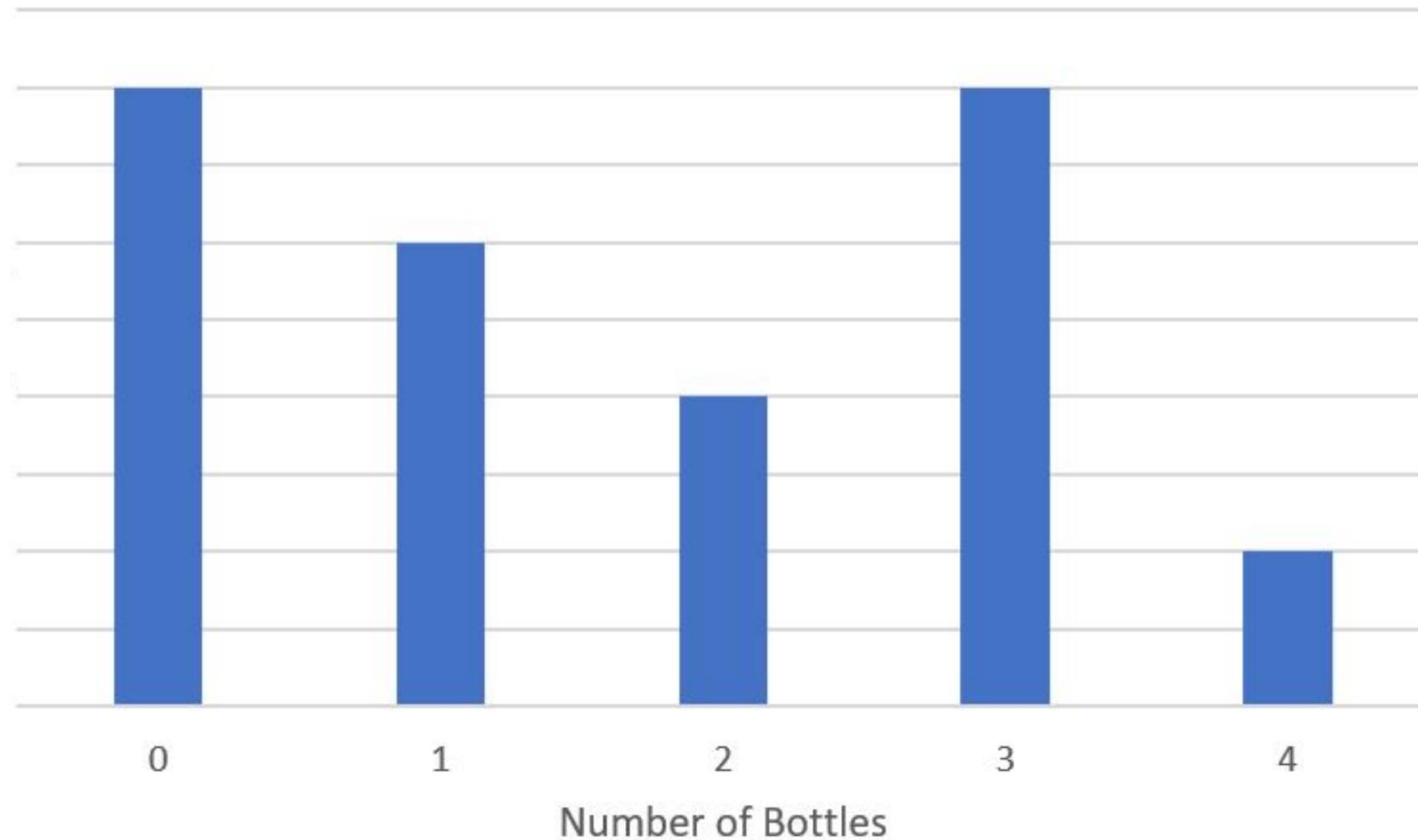
Number of children per household	Number of households (Frequency)	
1	4	$1 \times 4 = 4$
2	7	$2 \times 7 = 14$
3	11	$3 \times 11 = 33$
4	4	$4 \times 4 = 16$
5	3	$5 \times 3 = 15$
6	0	$6 \times 0 = 0$
7	1	$7 \times 1 = 7$
	30	89

$$89 \div 30 = 2.97$$

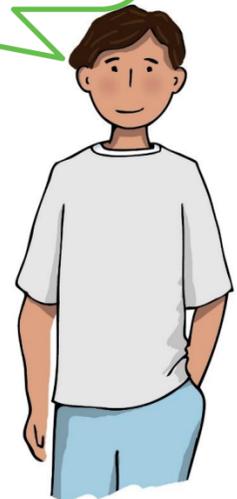


Explore

The bar chart below shows the number of bottles of water drunk by members of a swimming team per day. However, the scale on the frequency axis is missing! If you know that one of the frequencies is 12, what could the others be?



If 4 bottles had a frequency of 12, I know that 2 bottles would have a frequency of...

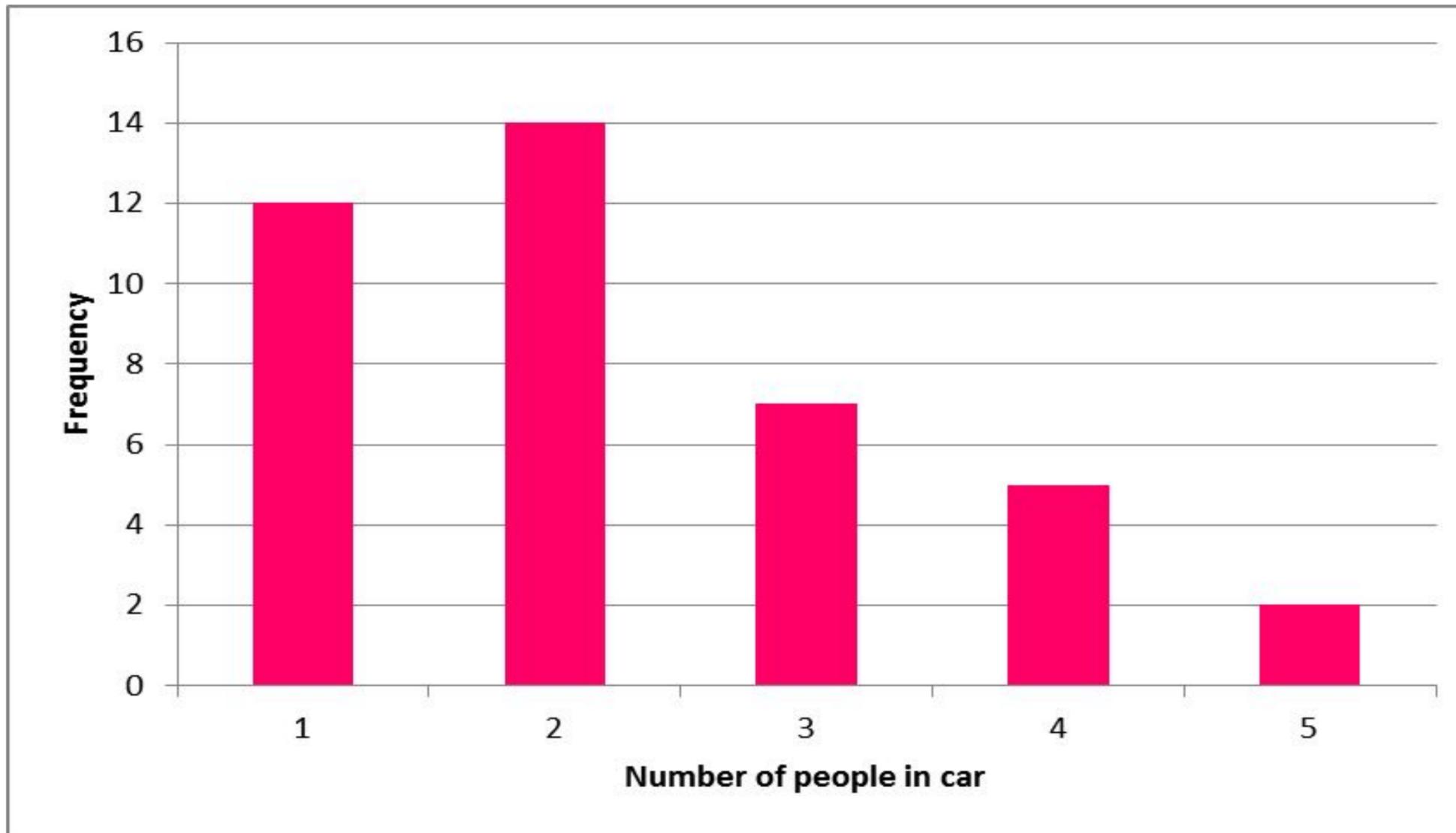


Answers



Try this

Jonah counted the number of people in each car passing his school over a 1 hour period. He puts his results in a bar chart. Complete the frequency table and state the mode and range.



Number of people in car

1	12
2	14
3	7
4	5
5	2

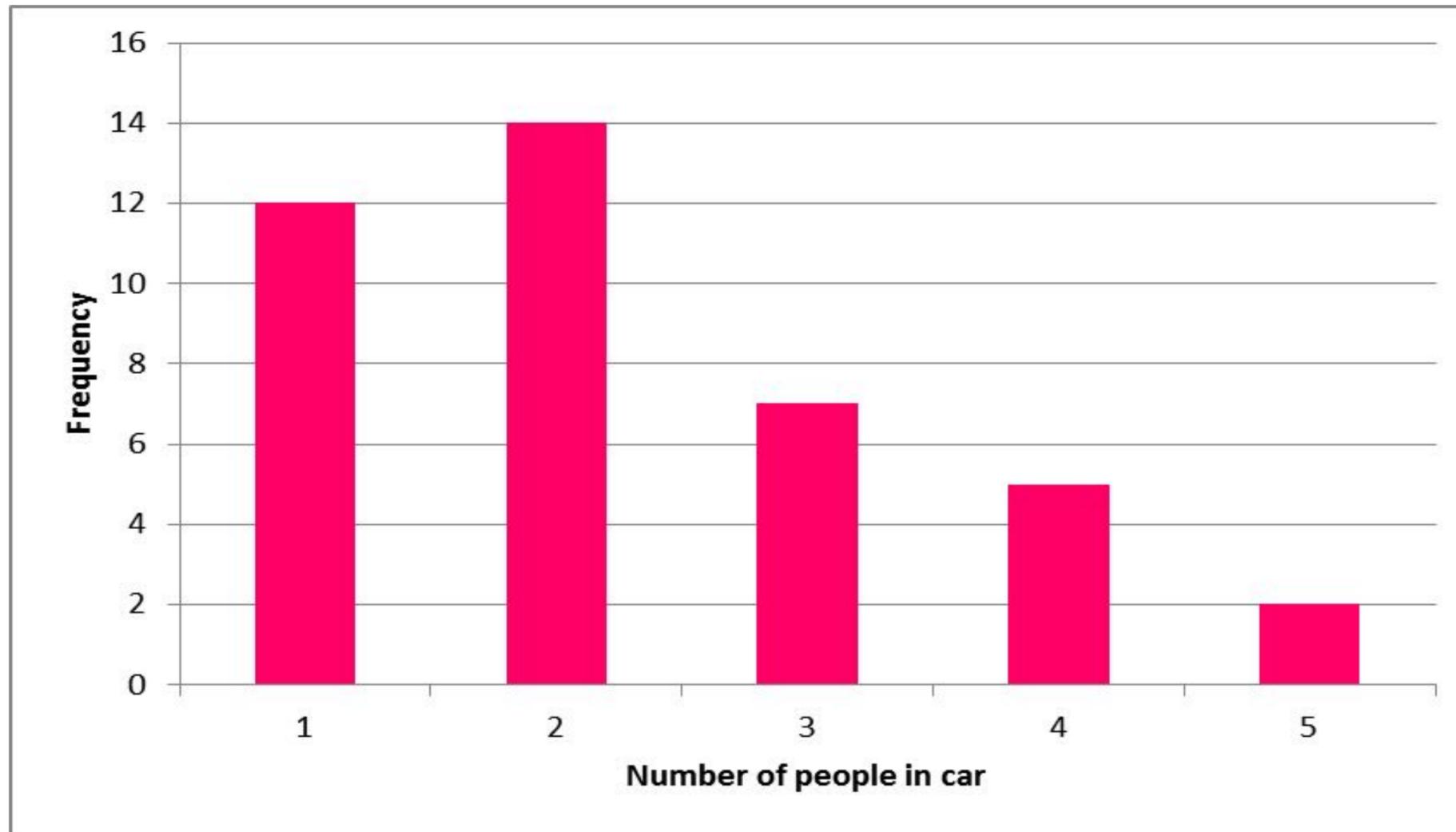
Mode: 2

Range: 4



Connect

Find the mean and median from the bar chart



Number of people in car	Frequency	Number x frequency
1	12	$1 \times 12 = 12$
2	14	$2 \times 14 = 28$
3	7	$3 \times 7 = 21$
4	5	$4 \times 5 = 20$
5	2	$5 \times 2 = 10$

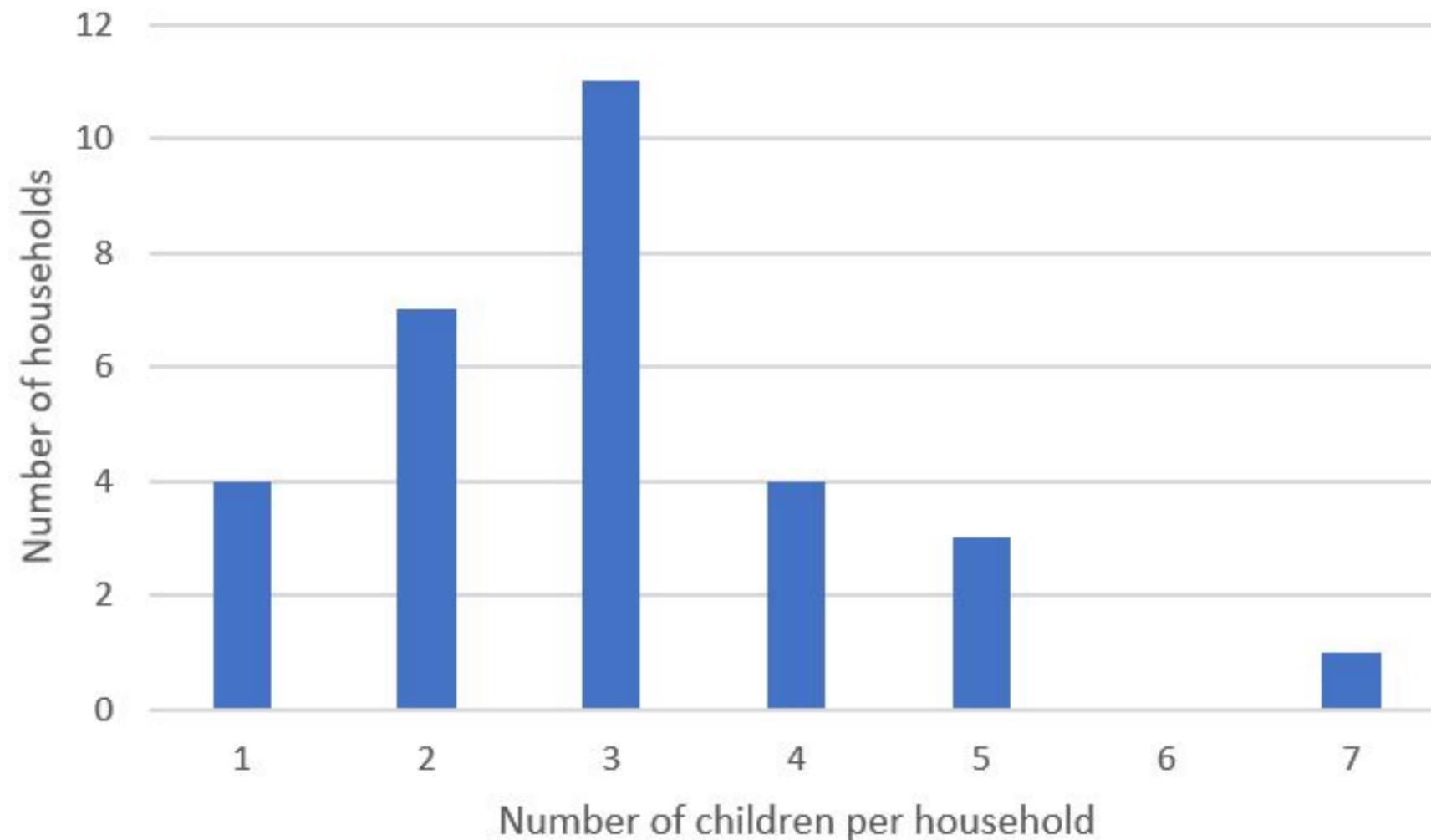
$$\text{Mean} = 91 \div 40 = 2.275$$

$$\text{Median} = 2$$



Independent task

Find the mean, range, mode and median from this bar chart.
Put the data into a frequency table first.



Number of children per household	Number of households (Frequency)	
1	4	$1 \times 4 = 4$
2	7	$2 \times 7 = 14$
3	11	$3 \times 11 = 33$
4	4	$4 \times 4 = 16$
5	3	$5 \times 3 = 15$
6	0	$6 \times 0 = 0$
7	1	$7 \times 1 = 7$
	30	89

$$\text{Mean} = 89 \div 30 = 2.97$$

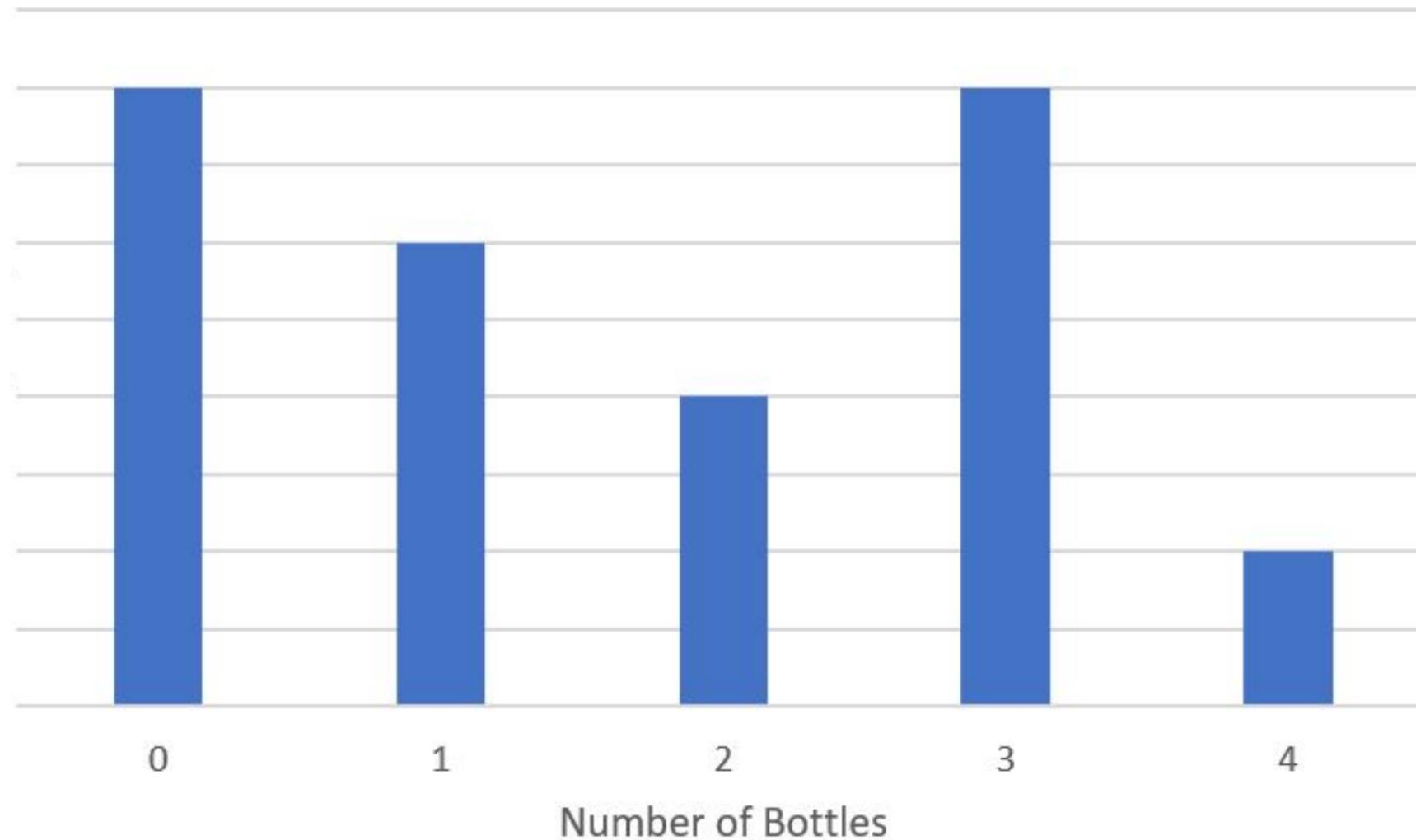
$$\text{Range} = 6. \text{ Mode} = 3.$$

$$\text{Median} = 3$$



Explore

The bar chart below shows the number of bottles of water drunk by members of a swimming team per day. However, the scale on the frequency axis is missing! If you know that one of the frequencies is 12, what could the others be?.



The scale on the y axis depends on which frequency is 12.

If 12 people drunk 2 bottles, then each gap is worth 3 bottles.

If 12 people drunk 4 bottles, then each gap is worth 6 bottles.

