

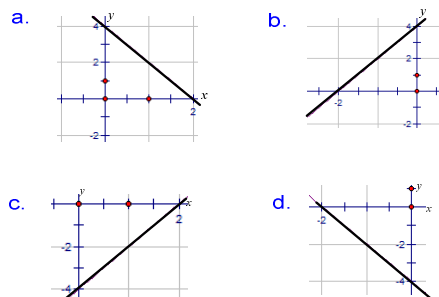
Lesson 3 Data and Statistics

Students, these are the learning targets we will be focusing on in today's MCA prep session:

1. Students will use measures of central tendency and variability to describe, compare and draw conclusions about sets of data.
2. Students will determine approximate line of best-fit and use the line to draw conclusions.
3. Students will analyze histograms, bar graphs, circle graphs, stem-and-leaf plots and box-and-whisker plots.
4. Students will understand the meaning of and be able to compute minimum, maximum, range, median, mean and mode of a data set.

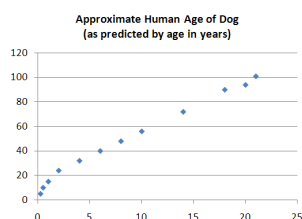
Students will determine approximate line of best-fit and use the line to draw conclusions.

Which graph below correctly displays the line $y = 2x - 4$?



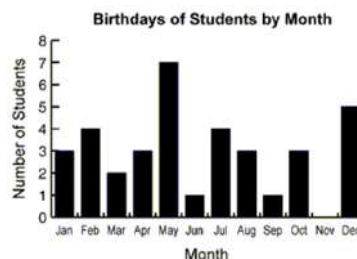
Students will determine approximate line of best-fit and use the line to draw conclusions (cont.).

Which answer below best estimates the value of y when $x = 22$, given the scatterplot?



- 2
- 3
- 102
- 154

Students will analyze histograms, bar graphs, circle graphs, stem-and-leaf plots and box-and-whisker plots.

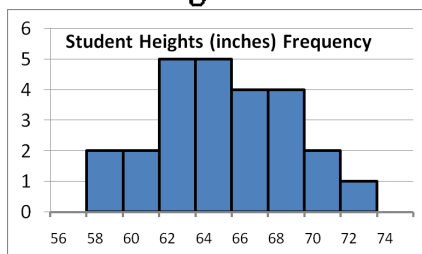


How many more students birthdays were there in May than April?

What was the percent of increase in student birthdays during this time?

Students will analyze histograms, bar graphs, circle graphs, stem-and-leaf plots and box-and-whisker plots.

Histograms

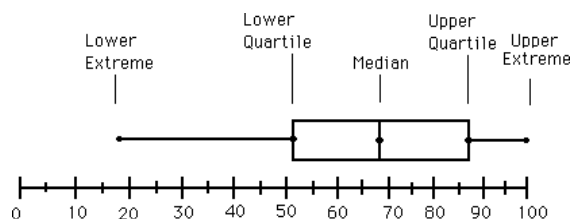


What percent of students are 68 inches or taller?

In what range does the median most likely fall?

Students will analyze histograms, bar graphs, circle graphs, stem-and-leaf plots and box-and-whisker plots.

Box & Whisker



The boxplot above shows the distribution of student scores on the last test. If 65% is a passing grade, what percent of students can you safely say passed the test?

Students will analyze histograms, bar graphs, circle graphs, stem-and-leaf plots and box-and-whisker plots.



Stem & Leaf

The Stemplot was made in the future (year 2028) and shows Joe Mauer's career homerun totals. In how many seasons did he hit 40 or more homeruns?

stem	leaf
1	6
2	2 4 8 9
3	0 1 1 2 3 4 5 6 7 8
4	0 5 8
5	0 1 8
6	1

Students will understand the meaning of and be able to compute minimum, maximum, range, median, mean and mode of a dataset. Students will use measures of central tendency and variability to describe, compare and draw conclusions about sets of data.

A shoe salesman sells the following sizes of shoes in a day's work:

$7\frac{1}{2}$, 8, $9\frac{1}{2}$, $9\frac{1}{2}$, 10, 10, 10, 10, 10, $10\frac{1}{2}$, 11, 11, 12, 13, $14\frac{1}{2}$



Find the following the values:

mean

median

mode

maximum

minimum

range

What number makes the most sense as a measure of center?

Students, please begin working on the additional practice problems provided in your packet.