

Alg 1 0.13

Represent sets of data using different visual displays

frequency table

bar graph

horizontal

vertical

cumulative frequency

histogram

line graph

stem-and-leaf plot

circle graph (pie chart)

box-and-whisker plot (boxplot)

Activity: Favorite sport?

Angle measuring activity

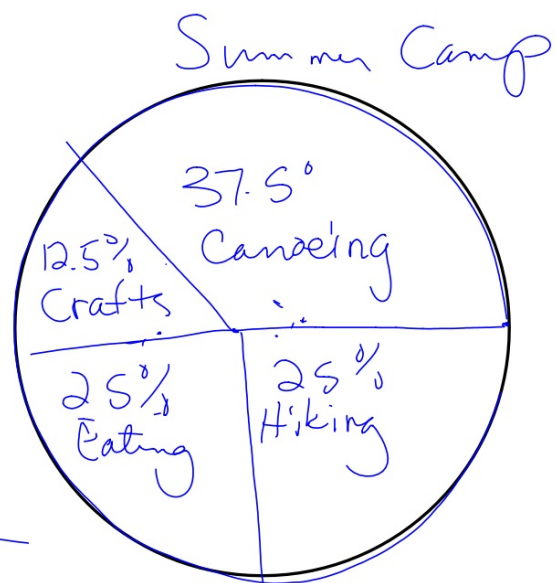
Number of degrees in a circle? 360°
 out of 100% (proportion)

Example 5 Make a Circle Graph

The table shows how Lily spent 8 hours of one day at summer camp. Make a circle graph of the data.

Summer Camp	
Activity	Hours
canoeing	3 $\frac{3}{8}$
crafts	1 $\frac{1}{8}$
eating	2 $\frac{2}{8}$
hiking	2 $\frac{2}{8}$

%	degrees
37.5%	135°
12.5%	45°
25%	90°
25%	90°
8	100% 360°



Example 6 Make a Box-and-Whisker Plot

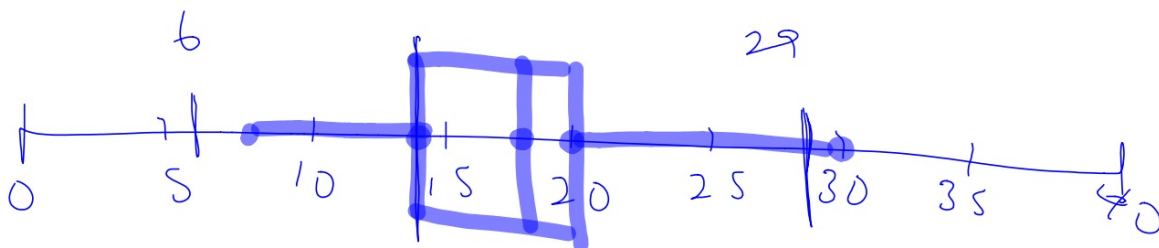
Draw a box-and-whisker plot for these data. Describe how the outlier affects the quartile points.

Boxplot

~~14, 30, 16, 20, 18, 16, 20, 18, 22, 18, 8~~

min Q_1 Q_2 Q_3 max

8 13 (14) 16 16 (18) 18 20 (20) 22 30



$$IQR = 6 \quad 15 - 9$$

$$6 \cdot 1.5 = 9 \quad 20 + 9$$

