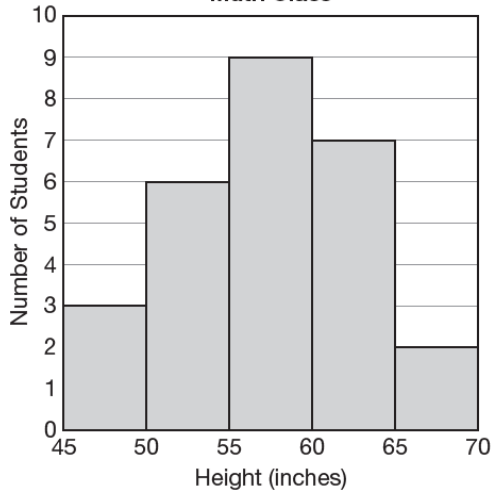


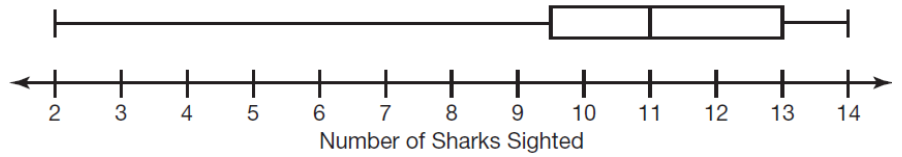
8.3.D1 - IQR & OUTLIERS

Determine which measure of center best describes the data in each given data display. Then determine the mean and median, if possible. If not possible, explain why not. *If necessary, refer to the 8.2 examples "Calculating the Mean & Median of a Data Set" and "Determining the Measure of Center which Best Represents a Data Set" in the Chapter 8 Summary.*

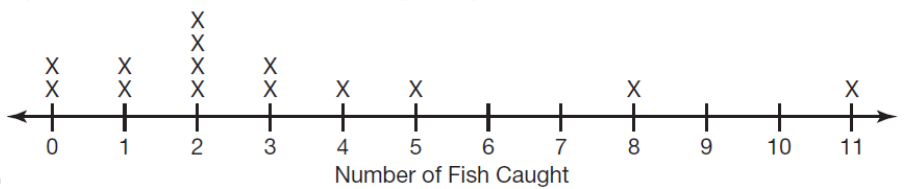
1. Student Heights in Mrs. Carson's Math Class



2. Results of Diving Expedition



3. Fishing Derby Results



Calculate the five number summary, the IQR, and the upper and lower fences of the given data set. Determine whether there are any outliers in each set and list them. *If necessary, refer to the 8.3 example "Using the Interquartile Range to Determine if a Data Set Contains Outliers" in the Chapter 8 Summary.*

4. 9, 15, 26, 30, 32, 32, 35, 36, 38, 40, 40, 45, and 59

Minimum = _____ IQR = _____
 Q1 = _____ Upper fence = _____
 Median = _____ Lower fence = _____
 Q3 = _____ Outliers: _____
 Maximum = _____

5. 18, 25, 30, 32, 33, 33, 35, 38, 39, 40, 42, 43, 44, 48, & 55

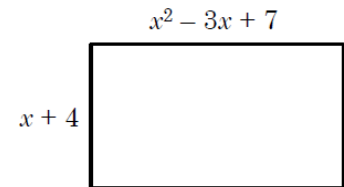
Minimum = _____ IQR = _____
 Q1 = _____ Upper fence = _____
 Median = _____ Lower fence = _____
 Q3 = _____ Outliers: _____
 Maximum = _____

6. 0, 3, 10, 16, 16, 18, 20, 21, 22, 24, 25, 25, 27, 30, 35, & 41

Minimum = _____ IQR = _____
 Q1 = _____ Upper fence = _____
 Median = _____ Lower fence = _____
 Q3 = _____ Outliers: _____
 Maximum = _____

Spiral Review – Refer to your 1st Semester Summary or your quadratics card.

7. When the quadratic polynomial $5x + 2 - 4x^2$ is written in standard form, which statement is FALSE?
- The degree of the polynomial is less than the number of terms.
 - The constant term is less than the leading coefficient.
 - The value of a is less than the value of b .
 - The value of c is less than the value of b .
8. A window in the shape of a rectangle is shown below. Area, of a rectangle, equals length times width. Express the area of the rectangle as a single polynomial in simplest form.



9. A line contains the points $(0, 0)$ & $(1, 4)$. Select ALL the equations that represent this line:
- | | | |
|-----------------------|-----------------------|------------------------------|
| <i>a.</i> $y = x + 4$ | <i>b.</i> $y = 4x$ | <i>c.</i> $y - 0 = 4(x - 0)$ |
| <i>d.</i> $x = 4y$ | <i>e.</i> $x = 0.25y$ | <i>f.</i> $y = 4x^2$ |
10. Sari has two jobs. She earns \$8 per hour babysitting and \$11 per hour working at a coffee shop.
- Write a linear inequality, in two variables, to represent the number of hours, x , babysitting and the number of hours, y , working at the coffee shop that Sari will need to work to earn a minimum of \$200.
 - Sari worked 15 hours at the coffee shop. Use the inequality to find the number of full hours she must babysit to reach her goal of \$200.
11. Luis spent \$55 buying songs and movies at an online store that charges \$1.25 for each song and \$2.75 for each movie. He purchased a total of 26 songs and movies combined.
- Let x = the number of songs purchased and let y = the number of movies purchased. Write a system of equations that represents this situation.
 - Determine how many songs and how many movies Luis purchased.