

Notes 2.1 ~ Measures of Central
Tendency + Box plots
2.2 ~ Measures of Spread

5 # Summary

minimum, First Quartile, Median, Third Quartile, maximum
aka
min, Q1, med, Q3, max

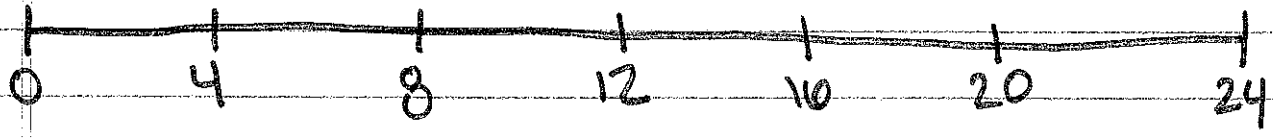
$$\bar{x} = \text{mean}$$

Rivera

Jenson

Rivera

Jenson



Standard Deviation

$$S_x = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n-1}}$$

$$\bar{x} =$$

$$S_x = \sqrt{\quad}$$

$$S_x =$$

x_i	$(x_i - \bar{x})$	$(x_i - \bar{x})^2$
9		
17		
10		
13		
12		
11		
15		
10		
14		
11		

To Find S_x in Calculator: STAT \rightarrow ① Edit
 type in list of #'s
 STAT \rightarrow Calc
 ① 1-Var Stats
 look for S_x

$$S_x =$$

$$\text{Range} = \text{max} - \text{min}$$

$$\text{IQR} = Q_3 - Q_1$$

$$\text{outlier} = 1.5 \text{IQR}$$

$$Q_3 + (1.5 \text{IQR}) = \text{upper outlier boundary}$$

$$Q_1 - (1.5 \text{IQR}) = \text{lower outlier boundary}$$

HW pg 80 1-9, 13, 15

pg 90 1, 2, 4, 6, 10, 13

Factoring Reminders

1st : GCF

2nd : 4 terms : GCF twice + combine

3rd : trinomials

4th : two terms

a) difference of squares

$$(a^2 - b^2) = (a + b)(a - b)$$

b) sum of cubes

$$(a^3 + b^3) = (a + b)(a^2 - ab + b^2)$$

c) difference of cubes

$$(a^3 - b^3) = (a - b)(a^2 + ab + b^2)$$

Ex problems

1) $x^3 + 2x^2 - 9x - 18$

2) $6x^2 + 42$

3) $4y^2 - 81$

4) $a^2 - 12a + 27$

5) $3m^2 + 12m + 8$

6) $27x^3 - 8$