

Math 1

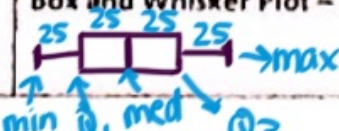
Gret Calculators.

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Math I - Notes --- Measures of Center

Vocabulary -

Median - Middle #	Mean - Average
Lower Quartile - Middle of min & median → 25% Q₁	Upper Quartile - Middle of Max & median → 25% Q₃
5 # Summary - #'s used to construct a box plot. min, Q ₁ , Median, Q ₃ , max	Box and Whisker Plot -  each section is worth 25%

Example 1: Analyzing the Data --- Median vs. Mean

Use the following numbers:

a. {2, 4, 1, 7, 11, 9, 12}

b. {1, 13, 16, 10, 22, 6, 15, 8}

c. {2, 14, 7, 9, 100, 3, 22, 19, 21}

No outliers

No outliers

outlier

✓ Mean: 6.6
 Median: 7

✓ Mean: 11.4
 Median: 11.5

Mean: 21.9
 ✓ Median: 14

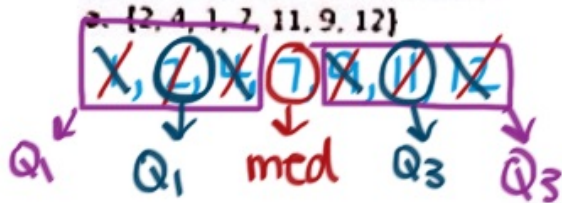
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Example 2: Calculating the Five-Number Summary

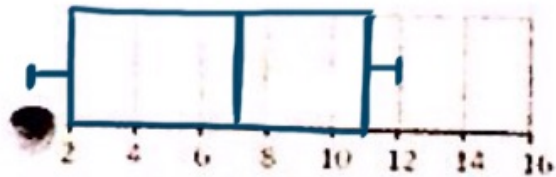
Use the following numbers:

$s = \{2, 4, 1, 7, 11, 9, 12\}$



Min Low #: 1 Quart 1: 2 Median: 7 Quart 3: 11 max Highest #: 12

Use the summary to create a box and whisker plot:



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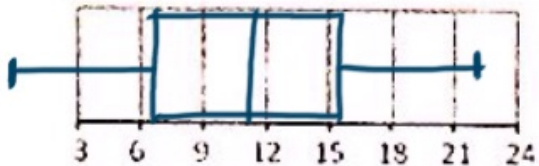


Use the following numbers:

b. {1, 13, 16, 10, 22, 6, 15, 8}

Low #: 1 Quart 1: 7 Median: 11.5 Quart 3: 15.5 Highest #: 22

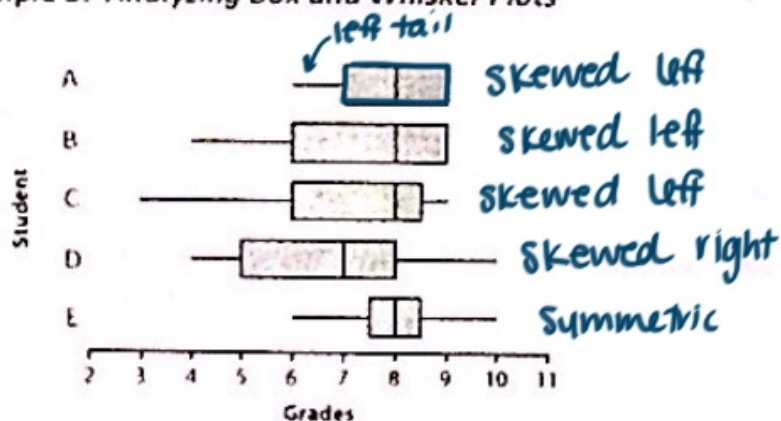
Use the summary to create a box and whisker plot:



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Example 3: Analyzing Box and Whisker Plots



* Where is the Box (chunk of data)
 ↳ Determine where tail is.

a. Which student(s) had the highest grade? What was the grade earned?

D & E 10

b. Which student(s) had the lowest grade? What was the grade earned?

C 3

c. Which student(s) upper quartile was the same as the highest score? What was the grade earned?

A & B 9

d. Which student(s) had the most normal distribution?

E

e. Which student(s) had the highest range of scores?

C & D.

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<u>L1</u>	<u>L2</u>
0	15
1	22
2	36
3	21
4	12
5	6
7	1
10	1

Stat → Calc → 1 var stats

List: L1 → 2nd 2

Freqlist: L2

calculate

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