

5/3/17 CCM6 and CCM6+

Find MAD and use it to understand data.

Analyze boxplots.

1. Agenda...CW/HW is pages 38-40 (and EOG EE packet set due Mon)
2. Get out p.37 to check (one problem)
3. Do Wed warm-ups NO CALCULATORS

Warm-ups

①

$$\frac{2 \cdot 3}{5 \cdot 3} + \frac{1 \cdot 5}{3 \cdot 5}$$

$$\frac{6}{15} + \frac{5}{15} = \frac{11}{15}$$

②

30

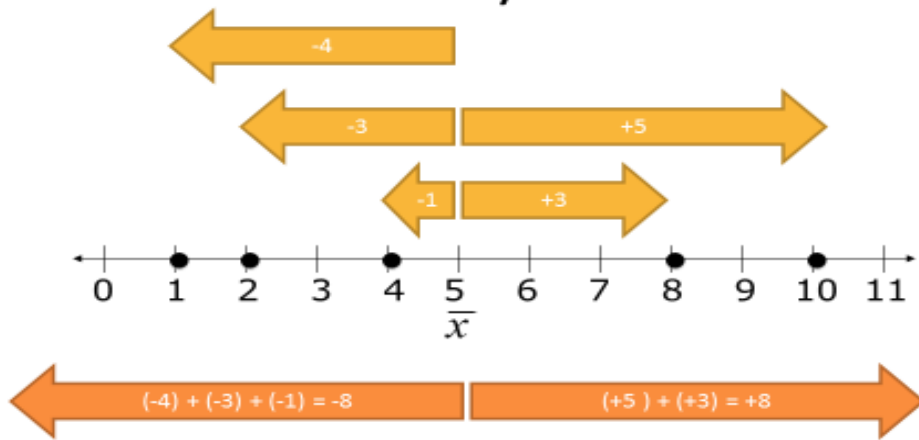
5 + .5

5	5	5	5	5
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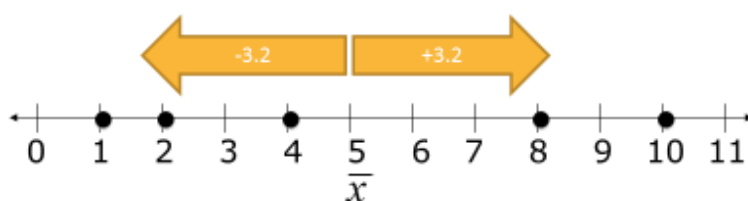
6 + +

$6 \div \frac{1}{5} = 30$

So what exactly is deviation?



Mean Absolute Deviation



Notice that our Mean Absolute Deviation or MAD was 3.2 and *most* of our original data does fall within plus or minus 3.2 points of the mean of 5.

Now take a few minutes to go back to our original question about the best student. Find the MAD score for each student and then make a decision based on all of your data about the best student. Be prepared to discuss.

Student	Test 1	Test 2	Test 3	Test 4
Li	65	82	93	100
Bessie	82	86	89	83
Jamal	80	99	73	88

HW

Mean Absolute Deviation Homework

mean
round to
tenths

Find the mean absolute deviation for each set of data.

1. ~~80, 82, 82, 88, 90, 94, 102, 104, 106~~

MEAN:		MAD:
DATA	DIFFERENCE Data minus Mean	ABSOLUTE VALUE

5. ~~160, 166, 170, 172, 178, 180, 190, 204, 260~~

MEAN:		MAD:
DATA	DIFFERENCE Data minus Mean	ABSOLUTE VALUE

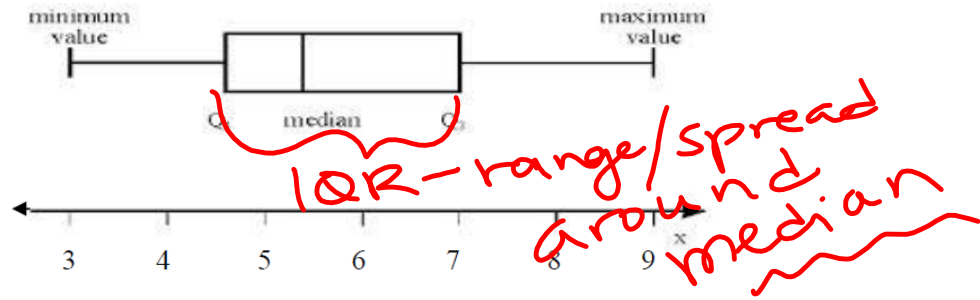
~~What is a mean? _____~~

~~What is the mean for this set of data? _____~~

~~What is mean absolute deviation?~~

~~the _____ of each data value from the _____~~

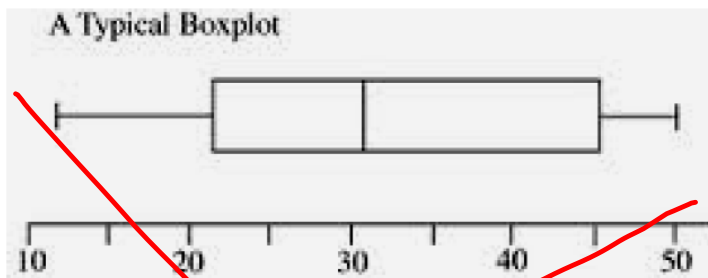
~~What is the MAD for this data set? Make a chart and figure it out! MAD = _____~~



Based on the picture above, what are the “FIVE MAGIC NUMBERS” and what do they mean?

1. minimum = 3
2. lower quartile ≈ 4.5
3. median ≈ 5.5
4. upper quartile = 7
5. maximum = 9

Looking at the boxplot below, name and give the value of the FIVE MAGIC NUMBERS.



- 1.
- 2.
- 3.
- 4.
- 5.

