Name_____ Date_____ Period_____

LESSON 2-10 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Find the Mean and MAD

Builds on Lesson 2-9 Session 1 · 6.SP.B.5c

TODAY'S LESSON	In Problem 3, Set W is symmetric, so you report its mean and its MAD.
YOU NEED TO	Find the mean and the mean absolute deviation (MAD) of a data set. **You will use it in Practice Form A, problems 3 and 6.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Find** the mean: add, then divide by the count.
2. **Find** each value's distance from the mean. Add them.
3. **Divide** that total by the count. That is the MAD.

WATCH ME

the steps in action

Find the mean and MAD of 52, 54, 56, 58, 60.

Step 1 280 ÷ 5 = 56.

Step 2 Distances: 4, 2, 0, 2, 4. Total 12.

Step 3 12 ÷ 5 = 2.4.

Answer **mean 56, MAD 2.4**

TRY IT WITH HELP

fill in each step

1. Find the mean and MAD of 31, 33, 35, 37, 39.

Step 1 175 ÷ 5 = _____

Step 2 Distances: 4, 2, 0, 2, 4. Total _____

Step 3 12 ÷ 5 = _____

2. Find the mean and MAD of 80, 82, 84, 86, 88.

Step 1 420 ÷ 5 = _____

Step 2 Distances: 4, 2, 0, 2, 4. Total _____

Step 3 12 ÷ 5 = _____

YOUR TURN

use the steps on your own

3. Find the mean and MAD.

a. 2, 4, 6, 8 _____

b. 10, 10, 10, 10 _____

c. 1, 5, 9, 13 _____

d. 20, 24, 28, 32 _____

Choose Mean or Median

Builds on Lesson 2-10 Session 1 · 6.SP.B.5d

TODAY'S LESSON	In Problem 4, 400 is an outlier in the ticket sales, so the median is the center to report.
YOU NEED TO	Choose the better center: mean for symmetric data, median when there is an outlier or skew. **You will use it in Practice Form A, problems 1 and 5.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Look** for an outlier or a long tail.
2. **Symmetric, no outlier**: report the mean (with the MAD).
3. **Outlier or skew**: report the median (with the IQR).

WATCH ME

the steps in action

Which center fits 12, 13, 15, 17, 19, 21, 400?

Step 1 400 is an outlier.
Step 2 The data is not symmetric.
Step 3 Report the median, 17, with the IQR.
Answer **median and IQR**

TRY IT WITH HELP

fill in each step

4. Which center fits 31, 33, 35, 37, 39?

Step 1 Outlier? _____
Step 2 Shape: _____
Step 3 Report the _____ with the MAD.

5. Which center fits 50, 54, 57, 59, 200?

Step 1 Outlier? _____
Step 2 Shape: _____
Step 3 Report the _____ with the IQR.

YOUR TURN

use the steps on your own

6. Write mean and MAD, or median and IQR.

a. 20, 22, 24, 26, 28 _____

b. 3, 4, 5, 6, 900 _____

c. 44, 46, 48, 50, 52, 54, 56 _____

d. 80, 82, 84, 86, 88, 500 _____

READY CHECK

a problem like the one in today's lesson

7. Fernanda reports a median of 70 for a skewed set. Which spread should go with it?

A the MAD **B** the IQR **C** the mean **D** no spread

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____