## Math Virtual Learning

## 6th Grade Math

Mean Absolute Deviation Continued May 15, 2020

6th Grade Math Lesson: May 15, 2020

## Objective/Learning Target:

Students will find and interpret measures of variability (mean absolute deviation).

## Warm Up Activity

Find the mean of the following data set.

$$
70,72,74,76,80,114
$$

| Data Set | 70 | 72 | 74 | 76 | 80 | 114 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| distance from mean |  |  |  |  |  |  |

## Warm Up Answers

Find the MAD of the following data set.

$$
\frac{70+72+74+76+80+114}{6}=\frac{486}{6}=81
$$

| Data Set | 70 | 72 | 74 | 76 | 80 | 114 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| distance <br> from 81 | 11 | 9 | 7 | 5 | 1 | 33 |

## MAD = 11

## Lesson Videos

Mean Absolute Deviation (MAD)

## Practice \# 1

For this activity, you will need a deck of cards and a family member to play along with you.

- To play: Draw 3 cards and add up the values. An ace is a 1. A jack, queen, and king are each worth 10 . Cards 2-10 are each worth their face value. If your sum is anything other than 22 (either above or below 22), say: "My sum deviated from 22 by
$\qquad$ ," or "My sum was off from 22 by $\qquad$ ."
- To keep score: Record each sum and each distance from 22 in the table. After five rounds, calculate the average of the distances. The player with the lowest average distance from 22 wins the game.

Practice \# 1 - Whose average distance from 22 is the smallest? Who won the game?

| player A | round 1 | round 2 | round 3 | round 4 | round 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| sum of cards |  |  |  |  |  |
| distance from 22 |  |  |  |  |  |

Average distance from 22 :

| player B | round 1 | round 2 | round 3 | round 4 | round 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| sum of cards |  |  |  |  |  |
| distance from 22 |  |  |  |  |  |

Average distance from 22 :

## Practice \#2

## Mean Absolute Deviation Desmos Practice <br> - click Join <br> - type your first name <br> - click Continue without Signing In



## Student Preview

## Summary/Reflection

The dot plots show the amounts of time that ten U.S. students and ten Australian students took to get to school. Which statement is true about the MAD of the Australian data set?


How would you describe the MAD of the U.S. and Australia?

## Additional Practice:

Click on the link below to get additional practice and to check your understanding!

## Practice:

IXL: Mean Absolute Deviation

Mathoplis: Mean Absolute Deviation

