

AGENDA

- Warm-Up
- Cornell Notes:
Missing Mean
- Think-Pair-Share
- Exit Ticket

WARM UP: Copy and Complete

A. Find the mean, \bar{x} , of each set of data.

1. 45, 70, 80

2. 35, 35, 35, 35

3. 98, 88, 72, 72

4. -5, -2, 0, 12, 9

B. Give an example of what each data set may represent.

Usain "Lighting" Bolt



http://youtu.be/3nbjhpcZ9_g



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Usain "Lighting" Bolt

In 2013, Jamaican sprinter Usain Bolt, averaged 9.53 seconds in the 100m dash. Below, are his recorded times in four world events:

Berlin	9.58 seconds
Jamaica	9.55 seconds
Paris	9.6 seconds
Boston	9.49 seconds

Talk with a neighbor about strategy you can use to answer this question:

How fast must Usain run in his next event?

Topic:
Missing Mean

LESSON ESSENTIAL QUESTION

How can we use the mean (or average) to set a goal?

Three steps
to find
missing data

1. Multiply the total #
of events by the mean
(or average).

$$\begin{array}{r} 9.53 \\ \times 5 \\ \hline 47.65 \end{array}$$

2. Add together the
data that was provided.

$$\begin{array}{r} 9.58 \\ 9.55 \\ 9.6 \\ +9.48 \\ \hline 38.22 \end{array}$$

3. Subtract step 2 from
step 1.

$$\begin{array}{r} 47.65 \\ -38.22 \\ \hline \end{array}$$

Ex) Mara knew she had an 88% average in her biology class, but she lost one of her papers. The three papers she had in her folder had scores of 98%, 84%, and 90%. What was the score on her missing paper?

Step 1: Figure the total score on four papers with an 88% average.
 $0.88 \times 4 = 3.52$

Step 2: Add together the scores from the three papers.
 $0.98 + 0.84 + 0.90 = 2.72$

Step 3: Subtract the scores you know from the total score.
 $3.52 - 2.72 = 0.80$

Mara had **80%** on the missing paper.

Towards the end of the first quarter, Bonnie wants to maintain an 85 average in her English class. During the quarter, she receive test scores of 98, 64, 55, 88. What score will Bonnie need on her fifth test to end the quarter with an 85?

Gabriela earns 87% on her first geography test. She wants to keep a 92% average. What does she need to get on her next test to bring her average up?

Ryan earned \$68.00 on Monday. How much money must he earn on Tuesday to have an average of \$80 earned for the two days?

Hailey, Tray, Dana, and Chris enter a contest to see who could bake the most chocolate chip cookies in an hour. They bake an average of 75 cookies. Hailey bakes 55, Tray bakes 70, and Dana bakes 90. How many does Chris bake?

EXIT TICKET

Four wrestlers made a pact to lose some weight before the competition. They lost an average of 7 pounds each over the course of 3 weeks. Dwayne Johnson loses 6 lbs, John Cena loses 5 lbs, and Big Show loses 9 lbs. How many pounds does Triple H lose?

