LESSON MAKER PRO

Find the Balance

See the mean as the point where data would balance.

GRADE 6 · 6.PS.2.a

6.PS.2.a "Represent the mean of a set of data graphically as the balance point represented in a line plot (dot plot)."

NAME _____ DATE _____

BALANCE POINT

The mean is the fair-share value of a data set. On a line plot, the mean is the balance point because the total distance of the data points to the left equals the total distance of the data points to the right.

WORKED EXAMPLE

The marked points show three data values. Find the mean, then identify the balance point.



1. Add the data values: 2 + 5 + 8 = 15.
2. Count the data values: 3.
3. Divide: 15 / 3 = 5.
4. The balance point is 5.

Answer: 5

PRACTICE 6 problems

1 The marked points show four data values. What number is the balance point?



ANSWER _____

2 The marked points show four data values. What number is the balance point?



ANSWER _____

3 Find the mean, or balance point, of these data values: 11, 11, 13, 15, 15.

ANSWER _____

4 Find the mean, or balance point, of these data values: 14, 16, 18, 20.

ANSWER _____

5 Find the mean, or balance point, of these data values: 21, 23, 23, 23, 25.

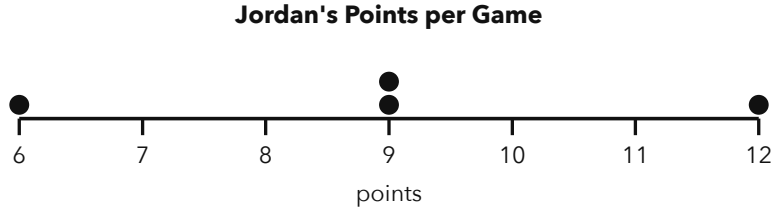
ANSWER _____

6 Find the mean, or balance point, of these data values: 26, 28, 30, 32, 34, 36.

ANSWER _____

APPLY IT Show your work

1 The line plot shows the number of points Jordan scored in four basketball games. What was Jordan's mean number of points per game?



ANSWER _____

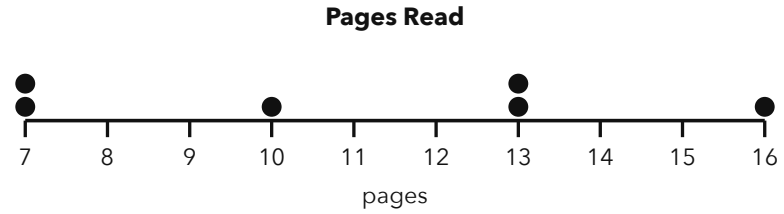
2 Lena tracked the minutes she spent editing videos during five sessions: 13, 16, 19, 22, and 25. What was her mean time per session?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The line plot shows the number of pages six students read during a reading challenge. Find the mean. Then explain how the distances from the mean balance on both sides.



WORK SPACE AND ANSWER

ANSWER KEY

Find the Balance

GRADE 6 · 6.PS.2.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	The marked points show four data values. What number is the balance point?	**5.5**
2	The marked points show four data values. What number is the balance point?	**7.5**
3	Find the mean, or balance point, of these data values: 11, 11, 13, 15, 15.	**13**
4	Find the mean, or balance point, of these data values: 14, 16, 18, 20.	**17**
5	Find the mean, or balance point, of these data values: 21, 23, 23, 23, 25.	**23**
6	Find the mean, or balance point, of these data values: 26, 28, 30, 32, 34, 36.	**31**

PART 2 · APPLY IT

1. **9 points per game** Add the four values shown in the line plot: 6 + 9 + 9 + 12 = 36. Divide 36 by 4 to get 9.
2. **19 minutes** The total time is 95 minutes. Divide 95 by 5 sessions to get 19 minutes.

CHALLENGE

The mean is 11 pages. To the left of 11, the two dots at 7 are 4 units away each and the dot at 10 is 1 unit away, for 9 total units. To the right of 11, the two dots at 13 are 2 units away each and the dot at 16 is 5 units away, also for 9 total units.

Accept equivalent mean forms, such as 11/2 for 5.5 and 15/2 for 7.5. For the challenge, accept any accurate explanation that shows equal total distances on both sides of 11.