LESSON MAKER PRO

Share It Fair

Find the equal share hidden in a set of numbers.

GRADE 5 · 5.PS.2.a

5.PS.2.a "Describe mean as fair share."

NAME _____ DATE _____

MEAN IS A FAIR SHARE

The mean is the amount each value would have if the total were shared equally. Add all the values, then divide by the number of values.

WORKED EXAMPLE

Four bowls hold 2, 4, 6 and 8 counters. What equal share could each bowl have?

Bowl A	Bowl B	Bowl C	Bowl D
2	4	6	8

1. Move 3 counters from D to A, then 1 from C to B.
2. Each bowl has 5; the total stays 20. Mean: 20 ÷ 4 = 5.

Answer: 5 counters in each bowl

PRACTICE 6 problems

1 Find the mean of 6, 8, and 10.

ANSWER _____

2 Find the mean of 5, 7, 11, 13, and 19.

ANSWER _____

3 A team scored 42 points across 6 games. What was the mean number of points per game?

ANSWER _____

4 Find the mean of 16, 19, 23, 27, and 30.

ANSWER _____

5 A reader completed 63 pages over 7 days. If the pages were shared equally across the days, how many pages would be read each day?

ANSWER _____

6 Find the mean of 25, 29, 31, 35, and 40.

ANSWER _____

APPLY IT Show your work

1 Use 24 counters and three cups with 4, 8 and 12 counters. Move counters until every cup has the same amount. Draw before and after. Find the mean and explain what stayed unchanged.

2 Over five days, Lila spent 28, 32, 36, 40, and 44 minutes practicing a song. If her practice time were shared equally across the days, how many minutes would she practice each day?

WORK SPACE

ANSWER

CHALLENGE One step up

A player wants a mean score of 32 points after five rounds. The known scores are 27, 29, 34, and 38 points, plus one more score. What must the last score be? Explain how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Share It Fair

GRADE 5 · 5.PS.2.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find the mean of 6, 8, and 10.	**8**
2	Find the mean of 5, 7, 11, 13, and 19.	**11**
3	A team scored 42 points across 6 games. What was the mean number of points per game?	**7 points**
4	Find the mean of 16, 19, 23, 27, and 30.	**23**
5	A reader completed 63 pages over 7 days. If the pages were shared equally across the days, how many pages would be read each day?	**9 pages**
6	Find the mean of 25, 29, 31, 35, and 40.	**32**

PART 2 · APPLY IT

1. **8 counters per cup; 4 + 8 + 12 = 24 and 24 ÷ 3 = 8. The total 24 and the three cups stay unchanged.** Move four counters from the 12-counter cup to the 4-counter cup; the 8-counter cup stays unchanged. Require equal shares and conservation of the total.
2. **36 minutes** Add the practice times to get 180 minutes, then divide by 5 days: 180 / 5 = 36. The mean practice time is 36 minutes per day.

CHALLENGE

32 points. A mean of 32 for five rounds needs a total of 160 points. The known scores total 128 points, so the last score must be 32 points.

Accept answers with correct units when units are requested. For the challenge, accept any explanation that shows a total of 160 points and subtracts the known total of 128 points. Supply 24 counters and three cups per student or pair for the redistribution task; students must demonstrate the transfer, not only divide.