

Name _____

1-7B Lesson Master**Questions on SPUR Objectives**

See pages 60–63 for objectives.

SKILLS Objective E

In 1–3, calculate the mean, the mean absolute deviation, and the range for each collection of data.

1. 2, 5, 7, 6, 6, 2, 3, 4, 8, 7

mean: _____

mean absolute deviation: _____

range: _____

2. 1.2, -2.3, 5.6, 4.2, -1.2, 9.2, -3.4

mean: _____

mean absolute deviation: _____

range: _____

3. $\frac{1}{4}, \frac{3}{8}, \frac{2}{5}, \frac{4}{5}, \frac{6}{20}$

mean: _____

mean absolute deviation: _____

range: _____

In 4–6, find the mean and mean absolute deviation in your head.

4. 10, 10, 10, 10, 10,
10, 10, 10, 10

mean: _____

m.a.d: _____

5. 8, 8, 8, 8, 8,
6, 6, 6, 6, 6

mean: _____

m.a.d: _____

6. 20, 24, 20, 24,
20, 24, 20, 24

mean: _____

m.a.d: _____

7. Construct a data set of 8 items that has a mean absolute deviation of 0.5 and for which $\mu = 10$.

8. Construct a data set of 7 items that has a mean of 2 and a mode of 5.

9. Construct a data set of 7 items that has a median of 4 and a mean of 6.

10. What are the M , m , and r for the data set you constructed in Question 9?

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USES

Objective I

11. Use these scores for Jenna’s first-semester math and English tests.

Math: 75, 77, 82, 91, 81, 82, 92, 86

English: 87, 82, 89, 93, 90, 85, 89, 91

a. Calculate the mean for each set of scores.

b. Calculate the mean absolute deviation for each set of scores.

c. In which subject are Jenna’s scores more consistent?

12. Use the running times in 5 track meets for Abby and C.J. in the 100-meter dash. Times are in seconds.

Abby: 11.64, 11.83, 11.70, 11.92, 11.87

C.J.: 11.81, 11.86, 11.73, 11.88, 11.79

a. Calculate the mean time for each girl.

b. Calculate the mean absolute deviation of the times.

c. Which girl is a more consistent runner? Justify your answer.

13. The costs for 5 brands of ice cream (1.75-quart size) at two grocery stores are shown in the table.

Brand	Great Grocers	Fantastic Foods
Brand A	\$5.29	\$5.59
Brand B	\$4.99	\$4.89
Brand C	\$4.85	\$4.79
Brand D	\$3.69	\$3.99
Store Brand	\$2.69	\$3.19

a. Calculate the mean price for ice cream at each store.

b. Calculate the mean absolute deviation of the prices.

c. If you could go to only one of these stores for ice cream, which one would you choose? Why?

d. Which store has less variation in price? Explain.
