Name _____

1-7B Lesson Master

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

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?

_____

Name

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.

_____