Name:

1-10 Additional Practice

- 1. A volleyball team played five games. In those games, the team won by 7 points, lost by 3, lost by 2, won by 4, and won by 9. What was the mean difference in scores over the five games?
- **3.** The water level of a lake fell by $1\frac{1}{2}$ inches during a $1\frac{2}{3}$ -week-long dry spell. Find the average rate at which the water level changed every week.
- 5. The temperature of a pot of water was 180.3°F and cools at a rate of -2.5°F per minute.
 - a. What is the temperature after 20 minutes?
 - **b.** Look for Relationships How many minutes will it take to cool from 180.3°F to 100.3°F? © MP.7
- Look for Relationships An elevator descends at a constant speed. What is the change in elevation after 19 seconds?
 MP.7

7. The quiz scores for 6 students who studied together

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in a math class are in the table.

a. What is the mean quiz score?

b. What is the median quiz score?

Time **Change in Elevation** (Meters) (Sec.)

- a. Simplify the expression by applying the
- Distributive Property.
- **b.** Evaluate the expression.

2. Use the expression -8(-2.5 - 7).

4. Simplify the expression $2\left(\frac{2}{5}\right) + 2\left(-\frac{1}{5}\right)$.

1	-2.25
6	- 13.5
10	-22.5
12	-27







PRACTICE



TUTORIAL

- 8. Josiah is asked to simplify the expression $\frac{2}{3} + \frac{1}{2}(8 + 3\frac{1}{4})$. Josiah incorrectly claims that the expression simplifies to $13\frac{1}{8}$.
 - a. What is the correct value of the expression?
 - b. What error did Josiah likely make?
- Higher Order Thinking The table shows the temperatures of the water in 14 different beakers. What is the average temperature, rounded to the nearest tenth of a degree?

Temperatures in Beakers

Temperature	4.5°C	3.7°C	4.3°C	4.1°C	2.9°C
Frequency	3	4	2	3	2



Assessment Practice

- **10.** A swimming pool is draining at a constant rate. The table shows the proportional relationship between the change in the water level and the number of hours the pool has drained.
 - a. Find the rate at which the water level is changing per hour.

Draining Swimming Pool

Hours Draining	Change in Water Level (in.)		
2	-3.5		
9	?		
17	-29.75		
23	?		

- **b.** Find the change in the water level after 9 hours.
- c. Find the change in the water level after 23 hours.
- **11.** In a classroom there are 6 students who are $5\frac{1}{2}$ feet tall, 2 students who are $4\frac{3}{4}$ feet tall, 4 students who are $4\frac{1}{4}$ feet tall, and 2 students who are 6 feet tall.

Which expression represents the mean height of the students in the classroom?

(a)
$$\frac{6(5\frac{1}{2}) + 2(4\frac{3}{4}) + 4(4\frac{1}{4}) + 2(6)}{6 \times 2 \times 4 \times 2}$$

(b)
$$\frac{6(5\frac{1}{2}) + 2(4\frac{3}{4}) + 4(4\frac{1}{4}) + 2(6)}{6 + 2 + 4 + 2}$$

(c)
$$\frac{6(4\frac{1}{2}) + 2(5\frac{3}{4}) + 4(6\frac{1}{4}) + 4(6)}{6 + 2 + 4 + 2}$$