## 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?
2. Use the expression -8(-2.5-7).
a. Simplify the expression by applying the Distributive Property.
b. Evaluate the expression.
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.
4. Simplify the expression $2\left(\frac{2}{5}\right)+2\left(-\frac{1}{5}\right)$.
5. The temperature of a pot of water was $180.3^{\circ} \mathrm{F}$ and cools at a rate of $-2.5^{\circ} \mathrm{F}$ per minute.
a. What is the temperature after 20 minutes?
b. Look for Relationships How many minutes will it take to cool from $180.3^{\circ} \mathrm{F}$ to $100.3^{\circ} \mathrm{F}$ ? © м mp. 7
6. Look for Relationships An elevator descends at a constant speed. What is the change in elevation after 19 seconds? © mp. 7

| Elevator Descent |  |
| :---: | :---: |
| Time <br> (Sec.) | Change in Flevation <br> (Meters) |
| 1 | -2.25 |
| 6 | -13.5 |
| 10 | -22.5 |
| 12 | -27 |

7. The quiz scores for 6 students who studied together in a math class are in the table.
a. What is the mean quiz score?
b. What is the median quiz score?
8. Josiah is asked to simplify the expression $\frac{2}{3}+\frac{1}{2}\left(8+3 \frac{1}{4}\right)$. 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?
9. 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 | $4.5^{\circ} \mathrm{C}$ | $3.7^{\circ} \mathrm{C}$ | $4.3^{\circ} \mathrm{C}$ | $4.1^{\circ} \mathrm{C}$ | $2.9^{\circ} \mathrm{C}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 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.

b. Find the change in the water level after 9 hours.

Draining Swimming Pool

| Hours <br> Draining | Change in Water <br> Level (in.) |
| :---: | :---: |
| 2 | -3.5 |
| 9 | $?$ |
| 17 | -29.75 |
| 23 | $?$ |

$\square$
c. Find the change in the water level after 23 hours.
$\square$
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) $\frac{6\left(5 \frac{1}{2}\right)+2\left(4 \frac{3}{4}\right)+4\left(4 \frac{1}{4}\right)+2(6)}{6 \times 2 \times 4 \times 2}$
(B) $\frac{6\left(5 \frac{1}{2}\right)+2\left(4 \frac{3}{4}\right)+4\left(4 \frac{1}{4}\right)+2(6)}{6+2+4+2}$
(C) $\frac{6\left(4 \frac{1}{2}\right)+2\left(5 \frac{3}{4}\right)+4\left(6 \frac{1}{4}\right)+4(6)}{6+2+4+2}$

