

**LESSON 1.2 Practice B****Evaluate the expression for the given value of the variable.**

1.)  $p + 13$  when  $p = 8$

2.)  $23 - x$  when  $x = 6$

3.)  $13y$  when  $y = 7$

4.)  $\frac{b}{5}$  when  $b = 75$

5.)  $m - 4$  when  $m = 33$

6.)  $\frac{81}{a}$  when  $a = 3$

7.) Your part-time summer job pays \$7 per hour. To find the amount of money you can earn in one week, you can evaluate the expression  $7h$ , where  $h$  is the number of hours you worked during the week. If you work 15 hours your first week, how much money do you earn for the week?

8.) To find the number of calories from protein in a serving of food, you can evaluate the expression  $4g$ , where  $g$  is the number of grams of protein in a serving. If a serving of nuts contains 12 grams of protein, how many calories from protein are in the serving?

**Evaluate the expression when  $a = 3$ ,  $b = 8$ ,  $m = 24$ , and  $q = 35$ .**

9.)  $b + q$

10.)  $am$

11.)  $q - m$

12.)  $\frac{m}{b}$

13.)  $m - b$

14.)  $a + q$

15.) During the winter, weather forecasters give the actual outdoor temperature and the “wind chill” temperature. This is because the blowing wind can make it feel colder than it actually is. The expression  $a - w$ , where  $w$  is the wind chill temperature and  $a$  is the actual temperature, can be used to find how many degrees colder it feels outside when the wind is blowing. If the actual temperature is  $35^\circ\text{F}$  and the wind chill temperature is  $16^\circ\text{F}$ , how many degrees colder does it feel because of the wind?

16.) The Pennsylvania Turnpike is a 528-mile long roadway that spans the entire state. To find how long it will take you to drive across the state on the turnpike, you can evaluate the expression  $\frac{L}{r}$ , where  $L$  is the length of the Pennsylvania Turnpike and  $r$  is your driving speed. If you maintain a driving speed of 66 miles per hour, how many hours will it take you to drive across the state?

17.) Which two expressions are the same?

A.)  $\frac{a}{b}$

B.)  $a - b$

C.)  $a \div b$

D.)  $\frac{b}{a}$