

**CHAPTER  
1****Cumulative Review***For use after Chapter 1***Evaluate the expression.** (*Lesson 1.1*)

- $12x$  when  $x = 6$
- $5.1 - w$  when  $w = 3.8$
- $\frac{t}{8}$  when  $t = 56$
- $m^2$  when  $m = 4$
- $2^n$  when  $n = 5$
- $\frac{1}{2}k$  when  $k = \frac{3}{4}$

**Evaluate the expression.** (*Lesson 1.2*)

- $27 - 11 + 9$
- $8 + 4 \cdot 3$
- $7 + 8^2 \div 4$
- $14 \div (3 + 2^2)$

**Translate the verbal phrase into an expression.** (*Lesson 1.3*)

- The product of 9 and a number  $x$
- 15 more than a number  $y$
- The difference of a number  $z$  squared and 6
- 11 less than three times a number  $w$

**Write an equation or an inequality.** (*Lesson 1.4*)

- The product of 7 and a number  $x$  is 42.
- The sum of a number  $y$  and 17 is at most 36.
- The product of 5 and the sum of a number  $z$  and 3 is less than 45.

**Check whether the given number is a solution of the equation or inequality.** (*Lesson 1.4*)

- $13 + m = 19$ ; 6
- $3p - 8 = 12$ ; 7
- $n - 1.2 \leq 3.7$ ; 5.1
- $r^2 + 8 > 21$ ; 4

**State the formula that is needed to solve the problem. Then solve the problem.** (*Lesson 1.5*)

- What is the interest earned on \$500 invested for 7 years in an account that earns simple interest at a rate of 4% per year?
- A bus travels at an average speed of 65 miles per hour. How many miles does the bus travel in 4.5 hours?

**Cumulative Review** *continued*  
*For use after Chapter 1***Identify the domain and range of the function.** (Lesson 1.6)

24.

<b>Input</b>	2	3	4	5	6
<b>Output</b>	3	8	13	18	23

25.

<b>Input</b>	1	4	7	10	13
<b>Output</b>	1	2	3	4	5

**Make a table for the function. Identify the range of the function.**

(Lesson 1.6)

26.  $y = x - 7$

Domain: 11, 13, 15, 17, 20

27.  $y = 4x - 6$

Domain: 2, 3, 5, 7

28. A contractor buys screws for \$1.55 per box and nails for \$1.05 per box. Write an equation for the total cost. Then find the total cost of 3 boxes of screws and 5 boxes of nails. (Lesson 1.6)

**Graph the function.** (Lesson 1.7)

29.  $y = 5x - 4$

Domain: 1, 2, 3, 4, 5

30.  $y = \frac{2}{3}x + \frac{1}{2}$

Domain: 0, 3, 6, 9, 12

**Write a rule for the function represented by the graph. Identify the domain and the range of the function.** (Lesson 1.7)