

# Practice B

For use with pages 317–321

Lesson 7.1

**Write the verbal phrase as a variable expression. Let  $x$  represent the number.**

- |   |                                |
|---|--------------------------------|
| 1. A number added to 10                           | 2. 14 decreased by a number    |
| 3. 4 times a number                               | 4. $-13$ increased by a number |
| 5. 11 decreased by the quotient of 9 and a number |                                |
| 6. Twice a number subtracted from 1               |                                |

**Write the verbal sentence as an equation. Let  $y$  represent the number.**

- 15 increased by a number equals 27.
- The difference of a number and 2 is 19.
- The sum of twice a number and 7 is 32.
- $\frac{1}{3}$  of a number decreased by 13 equals 45.

**Write a verbal phrase for the variable expression.**

- |              |             |                |
|--------------|-------------|----------------|
| 11. $x + 12$ | 12. $9 - a$ | 13. $m \div 5$ |
|--------------|-------------|----------------|

**Write a verbal sentence for the equation.**

- |                 |               |                    |
|-----------------|---------------|--------------------|
| 14. $b - 3 = 7$ | 15. $8y = 27$ | 16. $11 + 2x = 30$ |
|-----------------|---------------|--------------------|

**Write the real-world phrase as a variable expression. Be sure to identify what the variable represents.**

- |                                      |  |
|--------------------------------------|--|
| 17. 1 mile more than yesterday's run | 18. Two times your previous high score   |
| 19. One-third of the recipe          | 20. 3 inches shorter than your other dog |
- Yosemite National Park has many natural waterfalls within its boundaries, including Horsetail Fall and Yosemite Falls. Horsetail Fall, which is 1000 feet tall, is 1425 feet shorter than Yosemite Falls. Write an equation to find the height of Yosemite Falls. Then use mental math to solve the equation.
  - The population of Cape Coral, Florida increased by 27 thousand people from 1990 to 2000. In 2000, the population of Cape Coral was 102 thousand people. Write an equation to find the population of Cape Coral in 1990. Then use mental math to solve the equation.
  - In 2001, the cost of mailing a letter was 17 times the cost of mailing a letter in 1885. If it cost \$.34 to mail a letter in 2001, find the cost of mailing a letter in 1885.