Evaluate the expression when $a = 6$ and $b = 8$.

1. $4 + a$

2. $b + 1$

3. $a - 6$

4. $15 - b$

Write the phrase as an expression.

5. A number y decreased by 14

6. Twice a number z

7. 25 more than 50
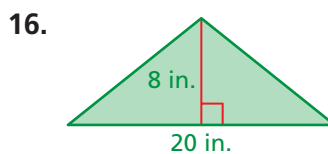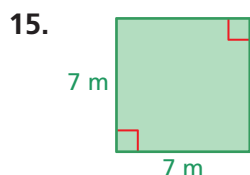
8. 40 divided by 5

Simplify the expression. Explain each step.

9. $3.1 + (8.6 + m)$

10. $(10 \cdot n) \cdot 7$

11. $3(15w)$

12. $40 + (x + 12)$

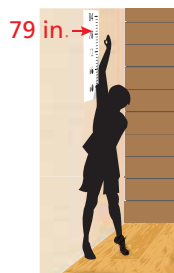**Use the Distributive Property to simplify the expression.**

13. $4(x + 8)$

14. $12(y - 5)$

Use a formula to find the area of the figure.

15.

7 m
7 m

16.

8 in.
20 in.

17. SOCCER GAME Playing time is added at the end of a soccer game to make up for stoppages. An expression for the length of a 90-minute soccer game with x minutes of stoppage time is $90 + x$. How long is a game with 4 minutes of stoppage time?

18. GEOMETRY The expression $15 \cdot x \cdot 6$ represents the volume of a rectangular prism with a length of 15, a width of x, and a height of 6. Simplify the volume expression.

19. VERTICAL JUMP You can reach 71 inches high while standing. An expression for your vertical jump is $h - 71$, where h is the height you reach with a jump. What is your vertical jump when you reach 79 inches?

79 in.→

20. PARTY FAVORS You make party favors for an event. You tie 9 inches of ribbon around each party favor. Write an expression for the amount of ribbon you need for n party favors. The ribbon costs $3 for each yard. Write an expression for the total cost of the ribbon.