

# Solving Equations

- D 15

15. Solve  $|x + 5| = 12$   
**A**  $x = 7$       **C**  $x = 7$  or  $x = -17$   
**B**  $x = 12$       **D**  $x = -7$  or  $x = 12$

16. Solve  $7|x - 6| = 49$   
**A**  $x = 55$       **C**  $x = 55$  or  $x = -43$   
**B**  $x = 13$       **D**  $x = 13$  or  $x = -1$

17. Solve  $|6x - 9| + 5 = 2$   
**A**  $x = 1$       **C** No solution  
**B**  $x = -2$       **D**  $x = -2$  or  $x = -1$

18. Solve  $y + w = x$  for  $y$ .  
**A**  $y = w - x$   
**B**  $y = x - w$

19. Solve  $xy + 7 = n$  for  $y$ .  
**A**  $y = xn - 7$   
**B**  $y = \frac{n - 7}{x}$   
**C**  $y = x(n - 7)$   
**D**  $y = \frac{1}{x}(n + 7)$

20. Solve  $V = IR$  for  $R$ .  
**A**  $R = \frac{V}{I}$   
**B**  $R = \frac{I}{V}$

21. Solve  $A = \frac{1}{2}bh$  for  $h$ .  
**A**  $h = \frac{A}{2b}$   
**B**  $h = \frac{b}{2A}$   
**C**  $h = \frac{2A}{b}$   
**D**  $h = A - \frac{1}{2}b$

22. Solve  $P = 2(l + w)$  for  $l$ .  
**F**  $l = \frac{P}{2} + w$   
**G**  $l = \frac{P}{2} - w$   
**H**  $l = \frac{P - w}{2}$   
**J**  $l = \frac{P + w}{2}$

23. If Debbie has  $k$  pencils, which algebraic expression represents seven less than double the number of Debbie's pencils?

- A.**  $7 - 2k$   
**B.**  $2(7 - k)$   
**C.**  $2k - 7$   
**D.**  $2(k - 7)$

24. If  $y$  represents Jen's age, which algebraic expression represents one fourth of Jen's age less five?

- A.**  $\frac{y - 5}{4}$   
**B.**  $4y - 5$   
**C.**  $5 - 4y$   
**D.**  $\frac{y}{4} - 5$

25. Stacey wrote 14 letters to friends each month for  $y$  months in a row. Write an expression to show how many total letters Stacey wrote.

- A.**  $14 - y$   
**B.**  $14y$   
**C.**  $14 + y$   
**D.**  $14/y$

26. Which equation represents the relationship "3 more than a number is 7"?

- A**  $n + 7 = 3$   
**B**  $n + 3 = 7$   
**C**  $3n = 7$   
**D**  $3 - n = 7$

27. Which equation represents the relationship "3 less than a number is  $-6$ "?

- A**  $n - 3 = -6$       **C**  $3 + n = -6$   
**B**  $3 - n = -6$       **D**  $n - 6 = 3$