Solving Equations

- 1. Evaluate 2 + x 2.8 for x = 9
 - **A** -68
- **C** -5
- **B** 58 **D** 72
- 2. Solve 44 = 14 2a
 - **A** a=-29 **C** a=15
 - **B** a = 29 **D** a=-15
- 3. Solve -14 + s = 32

 - **A** s = 46 **C** s = -46

 - **B** s = 18 **D** s = -18
- 4. Solve $\frac{d}{3} 9 = -12$.
 - A 9

C 6

B -3

- **D** 15
- 5. Solve $-\frac{3}{7}h = 6$.
 - A 14

C $2\frac{4}{7}$

B $-2\frac{4}{7}$

- **D** 14
- 6. Solve a + 6 = 3a 8.
 - A 1
 - **B** 2
 - **C** 7
 - **D** 14
- 7. Solve -a + 7 = 2a 8.
 - \mathbf{A} -3

c 5

D 15

- 8. Solve b 2 4b = -7 4b

- 9. Solve 43a + 10 26a = 27

 - **A** a = 1 **C** a = -17

 - **B** a = -1 **D** a = 17
- 10. Solve 50q 43 = 52q 81
 - **A** q = -19 **C** q = -38
 - **B** q = 38 **D** q = 19
- 11. Solve 7(z + 2) 3z = 44.
 - **A** $7\frac{1}{3}$
- **C** $10\frac{1}{2}$

B $7\frac{1}{2}$

- **D** $14\frac{1}{2}$
- 12. Solve 2(z + 1) = 16.
 - **A** 4

C 7.5

B 7

- **D** 9
- 13. Solve -(a-9) = 3a + 17.
 - **A** -8

c -2

 B_{-4}

- **D** 6.5
- 14. Solve 6(z+3) 9 = 27.
 - **A** 0

C 5.5

B 3

D 10.5

A
$$x = 7$$
 C $x = 7$ or $x = -17$ **B** $x = 12$ **D** $x = -7$ or $x = 12$ **16.** Solve $7|x-6| = 49$

Solve |x + 5| = 12

15.

A
$$x = 55$$
 C $x = 55$ or $x = -43$ **B** $x = 13$ **D** $x = 13$ or $x = -1$

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 $h = \frac{b}{2A}$

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-5C. 5-4yD. $\frac{y}{4}-5$ 25. Stacee wrote 14 letters to friends each month for y months in a row. Write an
 - Stacee wrote.

 A. 14 y

 B. 14y
 - C. 14 + yD. 14/y
- 26. Which equation represents the relationship "3 more than a number is 7"?A n + 7 = 3

expression to show how many total letters

C 3n = 7 **D** 3 - n = 7

B n + 3 = 7

is -6"? **A** n-3=-6 **C** 3+n=-6**B** 3-n=-6 **D** n-6=3

relationship "3 less than a number

Which equation represents the