

Write the letter for the correct answer in the blank at the right of each question.

For Questions 1–4, solve each equation.

1. $4x + 8 = 3x - 1$
 A. -7 B. 7 C. -9 D. -1 1. _____

2. $13a + 12 = 8a - 13$
 A. 5 B. -5 C. $\frac{1}{5}$ D. $-\frac{1}{5}$ 2. _____

3. $7a - 4 = 3(a + 9) + 4a$
 A. 3 B. 9 C. all numbers D. \emptyset 3. _____

4. $2(k - 4) = \frac{1}{2}(4k - 16)$
 A. 0 B. 4 C. all numbers D. \emptyset 4. _____

5. Nine less than five times a number is three more than twice the number. Choose the equation to find the unknown number. Then solve.
 A. $5 - 9t = 2t - 2; t = 1$ B. $5 + 9t = 3t + 2; t = -\frac{1}{2}$
 C. $5t - 9 = 2t + 3; t = -4$ D. $5t - 9 = 2t + 3; t = 4$ 5. _____

6. The perimeter of a rectangle is 150 inches. The length is 3 inches longer than five times the width. Find the length.
 A. 63 B. 12 C. 36 D. 38 6. _____

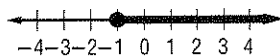
For Questions 7 and 8, write an inequality for each sentence.

7. The cost of a tank of gas at \$1.75 per gallon was more than \$30.
 A. $1.75g < 30$ B. $1.75g \leq 30$ C. $1.75g > 30$ D. $1.75g \geq 30$ 7. _____

8. Cassidy's allowance plus the \$18 she earned babysitting was still less than \$30.
 A. $a + 18 > 30$ B. $a + 18 \geq 30$ C. $a + 18 < 30$ D. $a + 18 \leq 30$ 8. _____

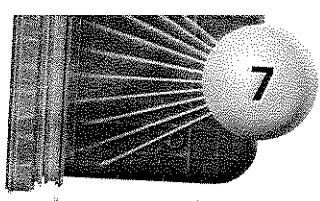
9. If $k = 9$, which word describes the sentence $4k - 7 \leq 30$?
 A. open B. true C. false D. subtraction 9. _____

10. Choose the inequality whose solution is graphed below.



A. $t \geq -1$ B. $t > 1$ C. $t \leq 1$ D. $t < 1$ 10. _____

Assessment



Chapter 7 Test, Form 2A *(continued)*

For Questions 11–17, solve each inequality.

11. $y - 5 \geq -8$
 A. $y \geq 13$ B. $y \geq -3$ C. $y \geq 3$ D. $y \geq -13$ 11. _____
12. $m - 1\frac{2}{3} < 1$
 A. $m < -\frac{2}{3}$ B. $m < -2\frac{2}{3}$ C. $m < 2\frac{2}{3}$ D. $m > -\frac{2}{3}$ 12. _____
13. $13y > 39$
 A. $y > 27$ B. $y < 27$ C. $y < 3$ D. $y > 3$ 13. _____
14. $\frac{x}{-3.2} < -19$
 A. $x < 60.8$ B. $x > 5.9$ C. $x > 60.8$ D. $x < 5.9$ 14. _____
15. $-\frac{t}{3} < 27$
 A. $t < -9$ B. $t > -81$ C. $t > -9$ D. $t < -81$ 15. _____
16. $-6x - 3 > -21$
 A. $x > 4$ B. $x < 4$ C. $x > 3$ D. $x < 3$ 16. _____
17. $5 + 0.4s > 30$
 A. $s < 62.5$ B. $s > 62.5$ C. $s > 12$ D. $s < 12$ 17. _____
18. **GOLDFISH** The longest recorded life span of a goldfish is 41 years. Suppose you have a goldfish that is 8 years old. Write and solve an inequality to find out how much longer your goldfish could live.
 A. $8 + y \leq 41; 33 \text{ yr}$ B. $8 + y \leq 41; 49 \text{ yr}$
 C. $y - 8 \leq 41; 33 \text{ yr}$ D. $y - 8 \leq 41; 49 \text{ yr}$ 18. _____
19. **EARNINGS** Nichelle earns \$7 per hour and gets a 10% commission on the sale price of each item she sells. She wants to work only 10 hours each week, and has a weekly earnings goal of \$200. Choose the inequality to find the total sales she must make to reach her goal. Then solve.
 A. $(7)(10) - 1.10s \geq 200, s = 118.18$ B. $(7)(10)(0.10)s \geq 200, s = 28.25$
 C. $(7)(10) + 1.10s \leq 200, s = 118.18$ D. $7(10) + 0.10s \geq 200, s = 1300$ 19. _____
20. Five times a number decreased by 8 is less than 92. Choose the inequality to find the unknown number. Then solve.
 A. $5n \div 8 < 92, n < 147.2$ B. $5n + 8 < 92, n < 16.8$
 C. $5n - 8 < 92, n < 20$ D. $5n - 8 < 92, n > 20$ 20. _____

Bonus Five times the quantity $s + 6$ equals three times the quantity $s - 2$. What value of s makes this sentence true? B: _____