

Unit 3: Equations and Inequalities

PRACTICE · SET 2

Name: _____ Date: _____

Solve each problem. Show your work on separate paper and write your final answer on the line provided.

1. Solve for x : $3(x + 4) = 27$

Answer: _____

2. Solve for x : $5x + 8 = 43$

Answer: _____

3. Solve for x : $2(x - 6) = 10$

Answer: _____

4. Solve for x : $4x - 9 = 23$

Answer: _____

5. Solve for x : $6(x + 2) = 30$

Answer: _____

6. Solve for x : $-3x + 7 = 22$

Answer: _____

7. Solve the inequality for x : $2x + 5 > 17$. Write your answer in the form $x > (\text{number})$.

Answer: _____

8. Solve the inequality for x : $4(x + 3) < 40$. Write your answer in the form $x < (\text{number})$.

Answer: _____

9. Solve for x : $(1/2)(x + 8) = 10$

Answer: _____

10. Solve for x : $8x + 15 = 7$. (Answer may be negative.)

Answer: _____

11. A rectangle has a perimeter of 34 cm. Its length is 5 cm more than its width w , so the equation is $2(w + w + 5) = 34$. Solve for the width w in cm.

Answer: _____

12. Solve the inequality for x : $3x - 4 > 11$. Write your answer in the form $x > (\text{number})$.

Answer: _____