

Name _____

Period _____

Date _____

Solve Equations: More Practice

Solve. SHOW YOUR WORK!!!

1. $x - 3 = 9$

$x - 8 = 15$

2. $-6.1x = -22.57$

$-5.3x = 22.26$

3. $-55 = 20x - 12$

$-75 = 40x + 11$

4. $\frac{5}{6}x - 2 = -12$

$\frac{2}{5}x + 2 = -12$

5. $\frac{x+5}{6} = 5$

$\frac{x-7}{3} = 9$

6. $18 = 3(2x + 5) - 7x$

$$-36 = 6(3x + 7) - 5x$$

7. $9x + 11 = 7x + 7$

$$5x + 13 = 3x + 7$$

8. $4.4(2.5x + 10) = 9x + 19 - 3x$

$$2.4(2.5x + 12.5) = 11x + 30 - 5x$$

9. $4(5a + 3) = 3(4a - 2)$

$$5(4b + 5) = 6(2b - 7)$$

10. $3(n-2) = 3n-2$

$$3(n-2) = 3n-6$$

11. Solve for y : $3x + 4y = 24$

Solve for y : $5x - 3y = 30$

12. Solve for r . $e = 5mr$

Solve for b . $a = 5bc$

13. Frank washed c cars for \$15 each and got \$35 in tips for doing such a good job. He earned \$170 altogether. WRITE AN EQUATION that could be used to find c , the number of cars he washed.

Mary cleaned w windows for \$6 each and got \$25 in tips for doing such a good job. She received \$187 altogether. WRITE AN EQUATION that could be used to find w , the number of windows she cleaned.

14. Find the mistake in the following solution. Circle the line that is wrong!

$$\begin{aligned}8 - 3(2n - 4) &= -10 \\8 - 6n - 12 &= -10 \\-6n - 4 &= -10 \\-6n &= -6 \\n &= 1\end{aligned}$$

Find the mistake in the following solution. Circle the line that is wrong!

$$\begin{aligned}12 - 5(2n - 4) &= -15 \\12 - 10n + 20 &= -15 \\10n + 32 &= -15 \\10n &= -47 \\n &= -4.7\end{aligned}$$

15. If $x = 5$, solve the following equation for y .

$$5x - 3y = 40$$

(15 Continued)

If $y = 2$, solve the following equation for x .

$$4x - 3y = 34$$

16. Solve: $8(x - 5) = 2x - 25 + 6x - 15$

Solve: $7(x - 2) = 2x - 2 + 5x + 10$

17. The length of a rectangle is $(x + 5)$ and the width is $(3x - 4)$. If the perimeter of the rectangle is 50 cm., find the length of the rectangles sides.

HINT: Draw it out, label it, solve for x . THEN find the length of the sides!

17 (continued)

The length of a rectangle is $(x + 8)$ and the width is $(4x - 3)$. If the perimeter of the rectangle is 80 in., find the length of the rectangles sides.

18. Solve: $0.05x + 4 = 22 - 0.25x$

$$0.04x + 9 = 12 - 0.2x$$

19. Humphrey has \$900 to spend on his vacation. He spends \$85 each day for his hotel. Write an equation that will find d , the number of days, when he has exactly \$475 left for entertainment on his vacation.

Brandy has \$230 to buy clothes. She bought a number of shirts that cost \$22 each and had \$143 left. Write an equation that could be used to find s , the number of shirts she bought.

20. Write and solve an equation:

Apples	\$.75
Bananas	\$.50

Braylen wants to buy 6 apples. If he has \$7.00, how many bananas can he buy?

Marianne picked out 4 ripe bananas. How many apples can she buy if she has \$5.00?