

Name _____

Solve the equation.

1) $\frac{1}{5}x = 6$

2) $5(2z - 3) = 9(z + 4)$

3) $6x + 7 - 4x - 9 = 8x - 6x - 5$

4) $\frac{4(y+1)}{3} = 3y + 1$

5) $\frac{1}{2} - x + \frac{3}{2} = x - 10$

6) $\frac{1}{2}(y + 2) = 5y$

7) $-0.3(x - 9) + x = 0.5(3 - x)$

8) $8x + 5(3x - 7) = -5 - 7x$

Solve the application.

- 9) The difference of a number and 8 is the same as 36 less the number. Find the number.

Substitute the given values into the formula and solve for the unknown variable.

10) $P = 2L + 2W$; $P = 18$, $W = 6$

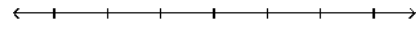
Solve the equation for the indicated variable.

11) $I = Prt$ for P

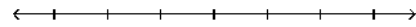
12) $5x - 6y = 13$ for y

Solve the inequality. Graph the solution set. Express your answer in interval notation.

13) $10x - 3 \geq 9x - 13$



14) $10x + 7 > 9x + 17$



Solve the inequality. Express your answer in interval notation.

15) $-5(x - 1) + 8 \leq -3(x - 0) + 7$

16) $\frac{2(4x + 7)}{5} > 4$

Answer Key

Testname: M050_9.7_9.1REVWKS

1) 30

2) 51

3) no solution

4) $\frac{1}{5}$

5) 6

6) $\frac{2}{9}$

7) -1

8) 1

9) 22

10) 3

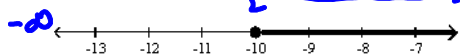
11) $P = \frac{1}{rt}$

12) $y = \frac{5x - 13}{6}$

$[-10, +\infty)$

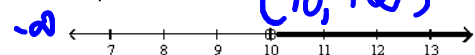
13) $\{x \mid x \geq -10\}$

$[-\infty, +\infty)$



14) $\{x \mid x > 10\}$

$(10, +\infty)$



15) $\{x \mid x \geq 3\}$

$[3, \infty)$

16) $\left\{x \mid x > \frac{3}{4}\right\}$

$\left(\frac{3}{4}, \infty\right)$