

Warm-Up February 9, 2017

a) $-5(3p - 4) = -55$

$$-15p + 20 = -55$$

$$-15p + \boxed{20 - 20} = -55 - 20$$

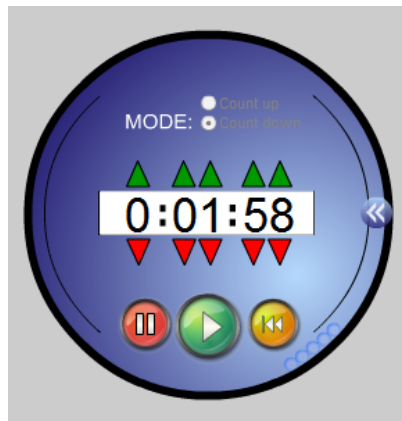
$$\frac{-15p}{-15} = \frac{-75}{-15}$$

$$p = 5$$

b) $41 = 12m - 5$

$$12m - 5 = 41$$

Equations Quiz



Solving Equations with Variables on Both sides

1. All variables to left side
2. Simplify like terms [Group like terms]
3. solve for variable

A. $6x + 2 = 10 + 4x$

$$\textcircled{6}x - \textcircled{4}x + 2 = 10 + \boxed{4x - 4x}$$

$$2x + 2 = 10 \quad \leftarrow$$

$$2x + \boxed{2 - 2} = 10 - 2$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

B. $-3x + 7 = 2x - 8$

$$-3x - 2x + 7 = \boxed{2x - 2x} - 8$$

$$\boxed{-5x + 7 = -8}$$

$$-5x \boxed{+ 7 - 7} = -8 - 7$$

$$\frac{-5x}{-5} = \frac{-15}{-5}$$

$$x = 3$$

Verify

LS	RS
$-3x + 7$	$2x - 8$
$-3(3) + 7$	$2(3) - 8$
$-9 + 7$	$6 - 8$
-2	-2
	✓

c. $3r - 2 = |r + 4$

$3r - 1r - 2 = \boxed{1r - 1r} + 4$

$2r - 2 = 4$

$2r \boxed{-2+2} = 4 + 2$

$\frac{2r}{2} = \frac{6}{2}$

$r = 3$

$\begin{matrix} -y = 10 \\ y = -10 \end{matrix}$

d) $1 - \frac{y}{5} = 3$

$\boxed{1-1} - \frac{y}{5} = 3-1$

$\cancel{(-5)} - \frac{y}{\cancel{5}} = 2^{(5)}$

$\frac{-y}{-1} = \frac{10}{-1}$
 $y = -10$

$$E. \quad 4k + 4 = -2k - 8$$

$$4k + 2k + 4 = \boxed{-2k + 2k} - 8$$

$$6k + 4 = -8$$

$$6k \boxed{+4-4} = -8 - 4$$

$$\frac{6k}{6} = \frac{-12}{6}$$

$$k = -2$$

$$4g = 7 - 3g$$

$$4g + 3g = 7 \boxed{-3g + 3g}$$

$$\frac{7g}{7} = \frac{7}{7}$$

$$g = 1$$

$$6(-2 - x) = -5(2x + 4)$$

$$-12 - 6x = -10x - 20$$

$$-12 - 6x + 10x = -0x + 10x - 20$$

$$-12 + 4x = -20$$

$$-12 + 12 + 4x = -20 + 12$$

$$\frac{4x}{4} = \frac{-8}{4} \quad x = -2$$

Homework

Pg 281

#6 c, d

#10 b, d, f

#11 A, C, E

#17 A, B

Extra

#10. a, c, e

#11. b, d, f

#17. c, d

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