

Warm-Up

February 9, 2018

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

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

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

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

$$p = 5$$

b) $41 = 12m - 5$

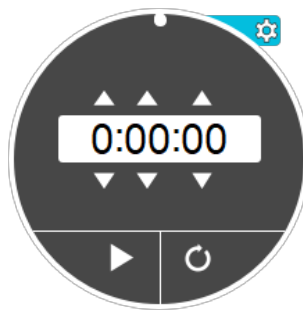
$$12m - 5 = 41$$

$$12m \boxed{+ 5 - 5} = 41 + 5$$

$$\frac{12m}{12} = \frac{46}{12}$$

$$m = 3\frac{10}{12} \quad 3\frac{5}{6}$$

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

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

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

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

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

$$x = 4$$

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

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

$$-5x + 7 = -8$$

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

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

$$x = 3$$

BEDMA
Verify/Check

L	R
$-3x + 7$	$2x - 8$
$-3(3) + 7$	$2(3) - 8$
$-9 + 7$	$6 - 8$
-2	-2

✓

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

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

$2r - 2 = 4$

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

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

$r = 3$

$-y = 9$
 $y = -9$

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

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

$\cancel{1} - \frac{1y}{5} = 2$

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

$y = -10$

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

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

$$6k + 4 = -8 \leftarrow$$

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

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

$$6k = -12$$
$$k = -2$$

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

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

$$-12 + 10x - 6x = \boxed{-10x + 10x} - 20$$

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

$$\boxed{-12 + 12} + 4x = -20 + 12$$

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

$$x = -2$$

$$4g = 7 - 3g$$

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

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

$$g = 1$$

Homework

#10 b, d, f

#11 A, C, E

#17 A, B

Pg 281

Extra

#10. a, c, e

#11. b, d, f

#17. c, d

Answers Page 514

