

Name: _____

Period 2 notes.Date 8/25/20

on multi-step equations.

$$1) \quad 4 - \underline{6h} - \underline{8h} = 60$$

$$\begin{array}{r} 4 - 14h = 60 \\ -4 \qquad -4 \\ \hline \end{array}$$

$$\begin{array}{r} -14h = 56 \\ -14 \qquad -14 \\ \hline \end{array}$$

$$h = -4$$



$$14 \overline{) 56} \begin{array}{r} 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ \times 4 \\ \hline 56 \end{array}$$

$$2) \quad -32 = \underline{-7n} - 12 + \underline{3n}$$

$$\begin{array}{r} -32 = -4n - 12 \\ +12 \qquad -12 \\ \hline \end{array}$$

$$\begin{array}{r} -20 = -4n \\ -4 \qquad -4 \\ \hline \end{array}$$

$$5 = n$$

$$3) \quad \begin{array}{r} 2n + 4 = 10 \\ -4 \quad -4 \\ \hline \end{array} \quad \text{check}$$

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

$$n = 3$$

$$2n + 4 = 10$$

$$2(3) + 4 = 10$$

$$6 + 4 = 10$$

$$10 = 10 \checkmark$$

$$4) \quad 2n + 6n = 0$$

$$\frac{8n}{8} = \frac{0}{8}$$

$$n = 0$$

check

$$2n + 6n = 0$$

$$2(0) + 6(0) = 0$$

$$0 + 0 = 0$$

$$0 = 0 \checkmark$$

$$5) \quad 4(3r + 2) - 3r = -10$$

$$(2r) + 8 - 3r = -10$$

$$\begin{array}{r} 9r + 8 = -10 \\ -8 \quad -8 \\ \hline \end{array}$$

$$\frac{9r}{9} = \frac{-18}{9}$$

$$r = -2$$



check.

$$4(3r + 2) - 3r = -10$$

$$4(3(-2) + 2) - 3(-2) = -10$$

$$4(-6 + 2) + 6 = -10$$

$$4(-4) + 6 = -10$$

$$-16 + 6 = -10$$

$$-10 = -10 \checkmark$$

$$6) \quad 2x + 2 = 12$$

$$\quad \quad \quad -2 \quad -2$$

$$\frac{2x}{2} = \frac{10}{2}$$

$$x = 5$$

check

$$2x + 2 = 12$$

$$2(5) + 2 = 12$$

$$10 + 2 = 12$$

$$12 = 12 \checkmark$$

$$7) \quad 5x + 10 = 35$$

$$\quad \quad \quad -10 \quad -10$$

$$\frac{5x}{5} = \frac{25}{5}$$

$$x = 5$$

check

$$5x + 10 = 35$$

$$5(5) + 10 = 35$$

$$25 + 10 = 35$$

$$35 = 35 \checkmark$$

$$8) \quad 7x + 14 = 35$$

$$\quad \quad \quad -14 \quad -14$$

$$\frac{7x}{7} = \frac{21}{7}$$

$$x = 3$$

check

$$7x + 14 = 35$$

$$7(3) + 14 = 35$$

$$21 + 14 = 35$$

$$35 = 35 \checkmark$$

$$9) 6 = 6 + 5x - 1x$$

$$\begin{array}{r} 6 \\ -6 \\ \hline 0 \end{array} = \begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array} + 4x$$

$$\frac{0}{4} = \frac{4x}{4}$$

$$0 = x$$

check

$$6 = 6 + 5x - x$$

$$6 = 6 + 5(0) - (0)$$

$$6 = 6 + 0 - 0$$

$$6 = 6 \checkmark$$

$$10) 33 + 7x = -2x + 5(3x - 3)$$

$$33 + 7x = \frac{-2x + 15x - 15}{}$$

$$33 + 7x = 13x - 15$$

+15

$$\begin{array}{r} 48 \\ +7x \\ -7x \\ \hline 48 \end{array} = 13x - 7x$$

$$\frac{48}{6} = \frac{6x}{6}$$

$$8 = x$$

check

$$33 + 7x = -2x + 5(3x - 3)$$

$$33 + 7(8) = -2(8) + 5(3(8) - 3)$$

$$33 + 56 = -16 + 5(24 - 3)$$

$$89 = -16 + 5(21)$$

$$89 = -16 + 105$$

$$89 = 89 \checkmark$$