

Alg 1

WEDS 9-12-12

(20)
pg 43

$$\begin{array}{rcl} 5x + 2 & = & 3x \\ -3x & & -3x \end{array}$$

$$\begin{array}{rcl} \downarrow & & \\ 2x + \cancel{2} & = & 0 \\ \cancel{+2} & & -2 \end{array}$$

$$\begin{array}{rcl} 2x & = & -2 \\ \hline x & = & -1 \end{array}$$

$$\boxed{x = -1}$$

$$5(-1) + 2 \stackrel{?}{=} 3(-1)$$

$$\begin{array}{rcl} \downarrow & & \\ -5 + 2 & \stackrel{?}{=} & -3 \end{array}$$

$$-3 \stackrel{?}{=} -3 \checkmark$$

(21)

$$\begin{array}{rcl} \downarrow & & \downarrow \\ 3c - 5 & = & 2c + 5 \\ -2c & & -2c \end{array}$$

$$\begin{array}{rcl} c - 5 & = & 5 \\ +5 & & +5 \end{array}$$

$$\boxed{c = 10}$$

$$3(10) - 5 \stackrel{?}{=} 2(10) + 5$$

$$\begin{array}{rcl} \downarrow & & \downarrow \\ 30 - 5 & \stackrel{?}{=} & 20 + 5 \end{array}$$

$$25 \stackrel{?}{=} 25 \checkmark$$

$$\textcircled{22} \quad -17 - 2x = 6 - x$$

$$\quad \quad \quad +2x \quad \quad +2x$$

$$\begin{array}{rcl} -17 & = & 6 + x \\ -6 & -6 & \end{array}$$

$$-23 = x$$

$$\boxed{x = -23}$$

CK

$$-17 - 2(-23) \stackrel{?}{=} 6 - (-23)$$

$$-17 + 46 \stackrel{?}{=} 29$$

$$29 \stackrel{?}{=} 29 \checkmark$$

$\textcircled{23}$

$$3(t-1) = 9 + t$$

$$\begin{array}{rcl} 3t - 3 & = & 9 + t \\ -t & & -t \end{array}$$

$$2t - 3 = 9$$

$$\quad \quad +3 \quad \quad +3$$

$$\frac{2t}{2} = \frac{12}{2}$$

$$\boxed{t = 6}$$

CK

$$3[(6)-1] \stackrel{?}{=} 9 + (6)$$

$$3[5] \stackrel{?}{=} 15$$

$$15 \stackrel{?}{=} 15 \checkmark$$

$$\textcircled{24} \quad \underline{5-x-2} = 3+4x+5$$

$$\begin{array}{rcc} & \swarrow & \searrow \\ 3-x & = & 8+4x \\ +x & & +x \end{array}$$

$$\begin{array}{rcc} 3 & = & 8+5x \\ -8 & & \swarrow \searrow \\ & & 8 \end{array}$$

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

$$\begin{array}{r} -1 = x \\ \boxed{x = -1} \end{array}$$

$$\underline{\text{ck}} \quad 5 \overset{+}{\cancel{(-1)}} - 2 \stackrel{?}{=} 3 + 4(-1) + 5$$

$$6 - 2 \stackrel{?}{=} 3 - 4 + 5$$

$$4 \stackrel{?}{=} -1 + 5$$

$$4 \stackrel{?}{=} 4 \quad \checkmark$$

(25) $2(x+4) = 3(x-2)$

$$\begin{array}{rcl} 2x + 8 & = & 3x - 6 \\ -2x & & -2x \end{array}$$

$$\begin{array}{rcl} 8 & = & x - 6 \\ +6 & & +6 \end{array}$$

$$14 = x$$

$x = 14$

$$2[(14) + 4] \stackrel{?}{=} 3[(14) - 2]$$

$$36 \stackrel{?}{=} 36 \checkmark$$