

$$\frac{1}{2}x + 3 = 7$$

-3 -3

$$\frac{\frac{1}{2}x}{2} = \frac{4}{2}$$

$$x = 2$$

$$\frac{1}{2}x + 3 = 7$$

-3 -3

$$\frac{\frac{1}{2}x}{\frac{1}{2}} = \frac{4}{\frac{1}{2}}$$

$$x = 8$$

$$\frac{1}{2}(8) + 3 = 7$$

$$4 + 3 = 7$$

$$7 = 7$$



A

$$\textcircled{B} \quad \begin{array}{ccc} 3x+6 & = & -x+5 \\ -x & & -x \end{array}$$

$$\begin{array}{ccc} 2x+6 & = & 5 \\ -6 & & -6 \end{array}$$

$$\frac{2x}{2} = \frac{-1}{2}$$

$$x = -\frac{1}{2}$$

$$\begin{array}{ccc} 3x+6 & = & -x+5 \\ +x & & +x \end{array}$$

$$\begin{array}{ccc} 4x+6 & = & 5 \\ -6 & & -6 \end{array}$$

$$\frac{4x}{4} = \frac{-1}{4}$$

$$x = \left(-\frac{1}{4}\right)$$

$$3\left(-\frac{1}{4}\right)+6 = -\left(-\frac{1}{4}\right)+5$$

$$\begin{array}{ccc} -\frac{3}{4}+6 & = & \frac{1}{4}+5 \\ \frac{1}{4} & & \frac{1}{4} \\ 5\frac{1}{4} & = & 5\frac{1}{4} \end{array}$$

$$-4(x-2) = 3x+6$$

$$-4x - 8 = 3x+6$$

$$+4x \quad +4x$$

$$-8 = 7x+6$$

$$-6 \quad -6$$

$$\frac{-14}{7} = \frac{7x}{7}$$

$$-2 = x$$

$$-4(x-2) = 3x+6$$

$$-4x - (-8) = 3x+6$$

$$-4x+8 = 3x+6$$

$$+4x \quad +4x$$

$$8 = 7x+6$$

$$-6 \quad -6$$

$$\frac{2}{7} = \frac{7x}{7}$$

$$\frac{2}{7} = x$$

$$-4\left(\frac{2}{7}-2\right) = 3\left(\frac{2}{7}\right)+6$$

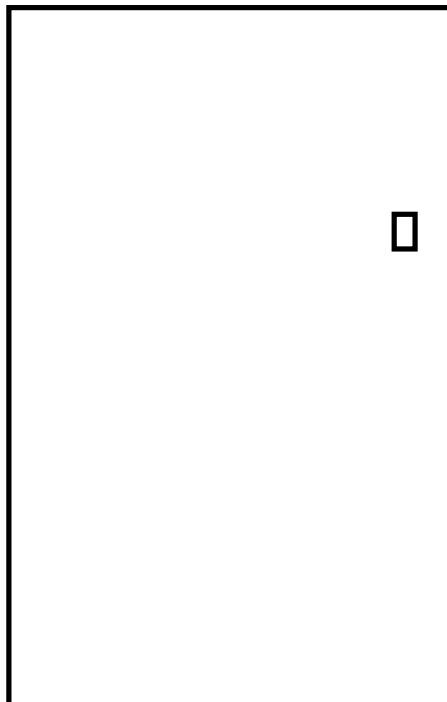
$$-4\left(\frac{2}{7}-\frac{14}{7}\right) = \frac{6}{7} + \frac{42}{7}$$

$$-4\left(-\frac{12}{7}\right) = \frac{48}{7}$$

$$\frac{48}{7} = \frac{48}{7}$$



C



$$3x - 8 = 10 + x$$

-x -x

$$2x - 8 = 10$$

-10 -10

$$2x - 18 = 0$$

+18 +18

$$\frac{2x}{2} = \frac{18}{2}$$

$$x = 9$$

$$3(9) - 8 = 10 + 9$$

$$27 - 8 = 19$$

$$19 = 19$$



$$5x + 3 = 2x - 21$$

$$\textcolor{green}{-2x} \quad \textcolor{green}{-2x}$$

$$3x + 3 = -21$$

$$\textcolor{green}{-3} \quad \textcolor{green}{-3}$$

$$\frac{3x}{\textcolor{green}{3}} = \frac{-24}{\textcolor{green}{3}}$$

$$x = -8$$

Check

$$5(-8) + 3 = 2(-8) - 21$$

$$-40 + 3 = -16 - 21$$

$$-37 = -37$$



$$-3(x+7) = 5x+11$$

$$-3x + -21 = 5x + 11$$

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

$$-21 = 8x + 11$$

$$-11 \quad -11$$

$$\frac{-32}{8} = \frac{8x}{8}$$

$$-4 = x$$

Check

$$-3(-4+7) = 5(-4)+11$$

$$-3(3) = -20+11$$

$$-9 = -9$$



SOLVE

$$5x + 3 = 2x - 21$$

$$\quad -3 \quad -3$$

$$5x = 2x - 24$$

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

$$\frac{3x}{3} = \frac{-24}{3}$$

$$x = -8$$

CHECK

$$5x + 3 = 2x - 21$$

$$5(-8) + 3 = 2(-8) - 21$$

$$-40 + 3 = -16 - 21$$

$$-37 = -37 \quad \text{!!}$$

2. SOLVE $-3(x+7) = 5x+11$

$$\begin{array}{rcl} -3x - 21 & = & 5x + 11 \\ + 21 & & + 21 \end{array}$$

$$-3x = 5x + 32$$

$$\begin{array}{rcl} -5x & & -5x \end{array}$$

$$\begin{array}{rcl} -8x & = & 32 \\ -8 & & -8 \end{array}$$

$$x = -4$$

CHECK

$$-3(x+7) = 5x+11$$

$$-3(-4+7) = 5(-4)+11$$

$$-3(3) = -20+11$$

$$-9 = -9 \quad \text{!!}$$

