

2-1 D2 Notes

Thursday, September 28, 2023 8:45 AM

Solve - Get the variable on a side by itself.

58) ^{Trap} $8 - 5(4 - 3x) = 2(4 - x) - 8x$

$$\underline{8 - 20} + 15x = 8 - \underline{2x} - \underline{8x}$$

$$\underline{-12 + 15x} = \underline{8 - 10x}$$

$$\begin{array}{r} -12 + 15x = 8 \\ +12 \quad +10x \\ \hline 25x = 20 \\ \underline{25} \quad \underline{25} \\ x = \frac{4}{5} \end{array}$$

$x = \frac{4}{5} \quad \left\{ \frac{4}{5} \right\}$

66) $-3(\overbrace{x-2}) = 2[x - 4(\overbrace{x-2}) + x]$

$$-3x + 6 = 2[\underline{x} - \underline{4x} + 8 + \underline{x}]$$

$$-3x + 6 = 2[-2x + 8]$$

$$\begin{array}{r} -3x + 6 = -4x + 16 \\ +4x - 6 \quad +4x - 6 \\ \hline x = 10 \end{array}$$

$\{10\}$

74) $\left(\frac{x-2}{4} - \frac{x+5}{6} = \frac{5x-2}{9} \right) 36$

$$\underline{9(x-2)} - \underline{6(x+5)} = \underline{4(5x-2)}$$

$$\underline{9x - 18} - \underline{6x - 30} = \underline{20x - 8}$$

$$\begin{array}{r} 3x - 48 = 20x - 8 \\ -3x \quad +8 \quad -20x +8 \\ \hline -40 = 17x \\ \underline{17} \quad \underline{17} \\ x = \frac{-40}{17} \end{array}$$

$\left\{ \frac{-40}{17} \right\}$