

How Can I solve equations

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Solving Equations

1. Distribute $3(x+4) = 3x + 12$

2. Get rid of fractions

3. Combine like terms

4. Solve for x

Ex 1: $-16 + 5n = \frac{1}{7} - 7(-6 + 8n) + 3$

$$-16 + 5n = 42 + -56n + 3$$

$$-16 + 5n = 45 - 56n$$

$$\begin{array}{r} +16 \qquad \qquad \qquad +16 \\ \hline \end{array}$$

$$5n = 61 - 56n$$

$$+56n = \qquad +56n$$

$$\underline{61n} = \underline{61}$$

$$61 \qquad \qquad \qquad 61$$

$$n = 1$$

$$\text{Ex 2: } 4x + 5(x+4) + 8x = \frac{3x-4}{9}$$

$$4x + 5x + 20 + 8x = \frac{3x-4}{9}$$

$$9(17x + 20) = \frac{3x-4}{9}$$

$$153x + 180 = \frac{3x-4}{9}$$

$$\begin{array}{r} 153x + 180 \\ -153x \end{array} \quad \begin{array}{r} 3x \\ -153x \end{array}$$

$$\begin{array}{r} 184 \\ -150 \end{array} = \begin{array}{r} -150x \\ -150 \end{array}$$

$$\boxed{\frac{184}{-150} = x}$$