

Algebra Bellwork - October 14, 2011

Emilio is cooking a big dinner. He can peel 2 carrots per minute. He needs 60 peeled carrots. How long will it take him to finish if he has already peeled 18 carrots?

Check your answers:

3) $x = -1$ 13) $x = 120$

5) $b = -3$ 15) $m = 45$

7) $h = -60$ 18) $b = 21$

9) $m = 96$ 19) $p = -16$

11) $x = 3$



Emilio is cooking a big dinner. He can peel 2 carrots per minute. He needs 60 peeled carrots. How long will it take him to finish if he has already peeled 18 carrots?

$$60 - 18 \div 2 = x$$

$$\frac{60 - 18}{2}$$

$$x = \text{minutes}$$

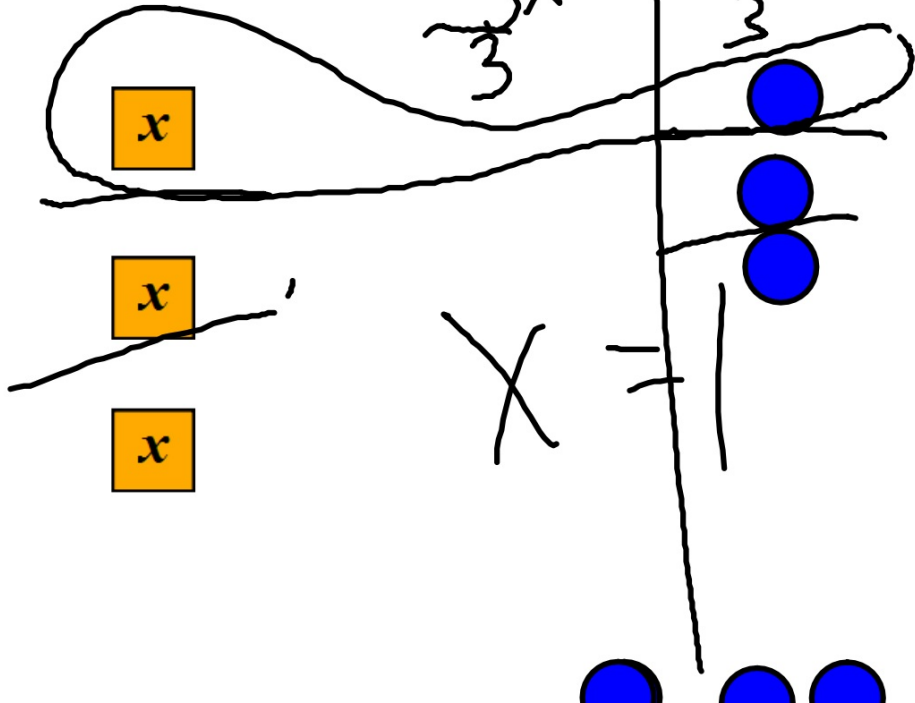
$$\begin{array}{r} 2x + 18 = 60 \\ -18 \quad +18 \\ \hline 2x = 42 \\ \frac{2x}{2} = \frac{42}{2} \quad x = 21 \end{array}$$

x



$$\frac{2x + x + 2}{3x} = \frac{5}{2}$$

$$\frac{3x}{3} = \frac{2}{3}$$



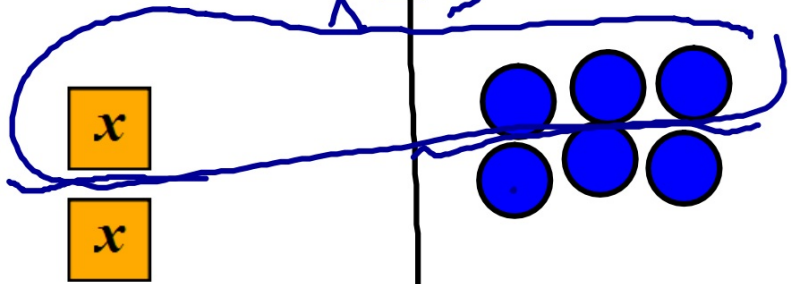


$$4x - 2 - 2x = 4$$

$$2x - 2 = 4$$

$$2x = 6$$

$$x = 3$$



$$4(2x - 3) = 12$$

$$\begin{array}{r|l} 8x - 12 & = 12 \\ + 12 & + 12 \end{array}$$

$$\begin{array}{r|l} 8x & = 24 \\ \hline 8 & 8 \end{array}$$

$$\cancel{x} = 3$$

Summary

Steps for Solving a Multi-Step Equation

- Step 1** Clear the equation of fractions and decimals.
- Step 2** Use the Distributive Property to remove parentheses on each side.
- Step 3** Combine like terms on each side.
- Step 4** Undo addition or subtraction.
- Step 5** Undo multiplication or division.