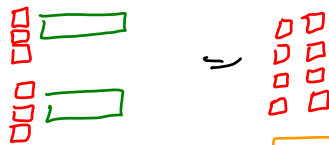


Draw a model with tiles and solve. Check your answer:

$$2(3+p) = 8$$



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

$$3+p = 4$$

$$\begin{array}{r} 3+p = 4 \\ -3 \quad -3 \\ \hline 1 \end{array}$$

$$p = 1$$

Is $x = -9$ the solution? answer?

$$L.S. = R.S.$$

$$66 = 6(x+7)$$

$$66 = 6(-9+7)$$

$$66 = 6(-2)$$

$$66 \neq -12$$

NO.

Each side of a regular octagon is decreased by 3 cm. If the perimeter of the new octagon is 48 cm, what was the measure of each side of the original octagon?

$$P = 8s$$

$$P = 8(x-6)$$

$$48 = 8(x-6)$$

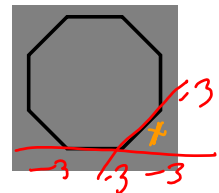
$$48 = 8x - 48$$

$$\begin{array}{r} +48 \quad +48 \\ 48 = 8x - 48 \\ \hline 96 = 8x \end{array}$$

$$\frac{96}{8} = \frac{8x}{8}$$

$$12 = x$$

Let x represent the original side length



\therefore The original side length was 12 cm