

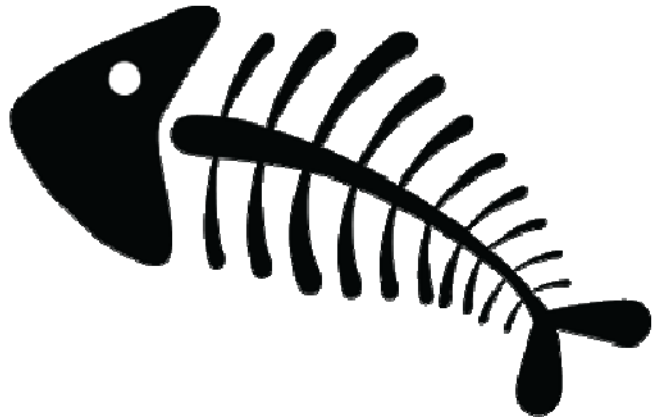
Name \_\_\_\_\_

Date \_\_\_\_\_

## Polynomial Multiplication - Step-by-Step Lesson

Find the product and make sure to simplify your answer.

$$-3x(4x^2 - x + 10)$$



### Explanation:

In algebra when we use the distributive property, we are expanding or distributing.

Now, we will solve this equation. We will distribute the  $-3x$ .

$$\begin{aligned} & -3x(4x^2 - x + 10) && \text{multiply each term by } -3x \\ & = -3x(4x^2) - 3x(-x) - 3x(10) \\ & = -12x^3 + 3x^2 - 30x \end{aligned}$$

So, the answer is  $-12x^3 + 3x^2 - 30x$ .

