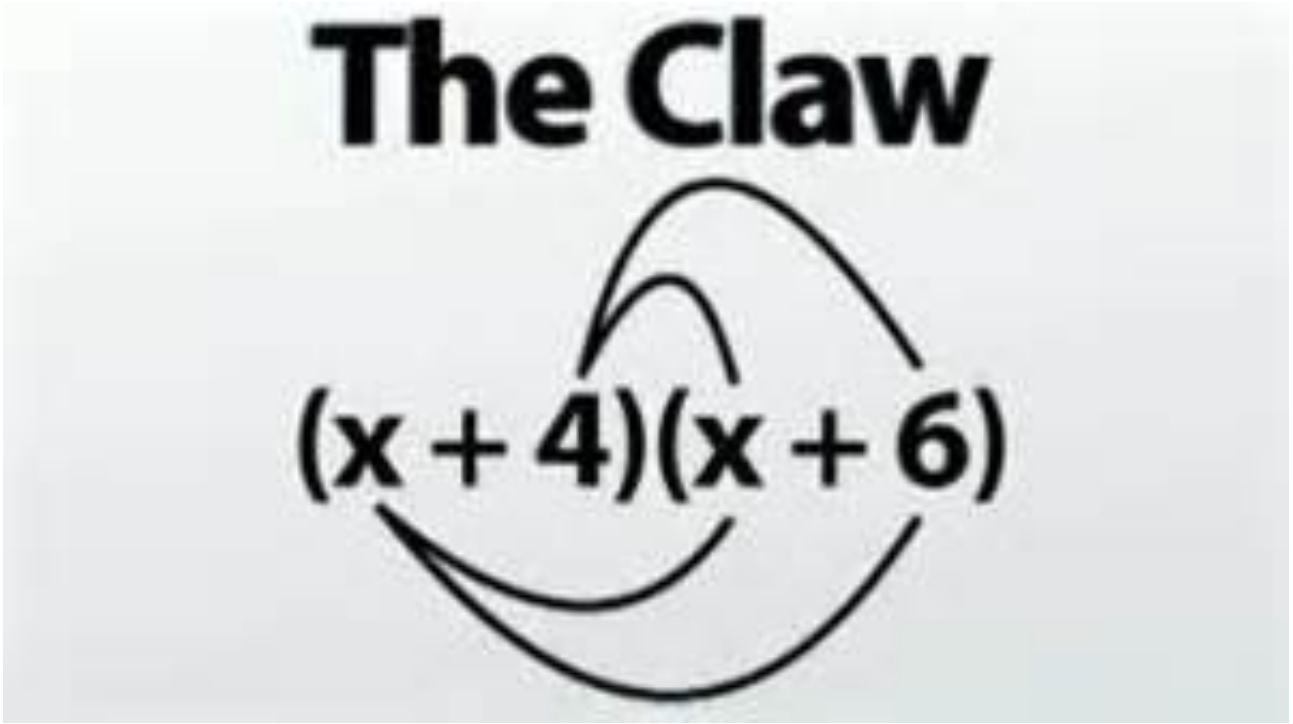
Lesson 1.2.2: Multiplying Polynomials



By the end of this lesson, I will be able to answer the following questions…

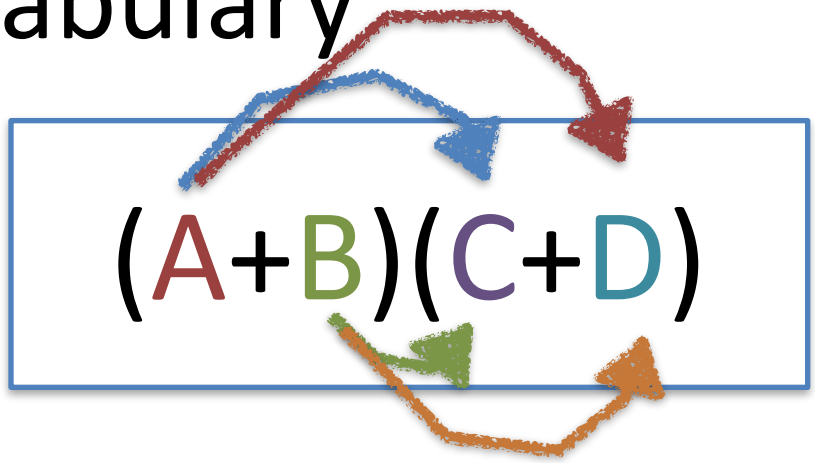
1. How can I use the distributive property to multiply polynomials?

2. What is F.O.I.L.?

3. How can I apply polynomial operations to problems involving geometry (area)?

Vocabulary

- F.O.I.L. technique



AC + AD + BC + BD

Prerequisite Skills with Practice

Simply the following using properties of exponents.

$x^2 \cdot x^3$ $\quad$ $2x \cdot 6x^8$ $\quad$ $x^3 \cdot y^7$ $\quad$ $4x^3(-3y^7)$

Explain the difference between difference in technique you'd use to simplify the following

$2x^3 + 5x^3$ vs. $(2x^3)(5x^3)$

Example one

Find the product of:

$$(2x-1)(x+18)$$

Example two

Find the product of:

$$(x^3+9x)(-x^2+11)$$

Example three

Find the product of:

$$(3x+4)(x^2+6x+10)$$

Ridiculously cool hamster…

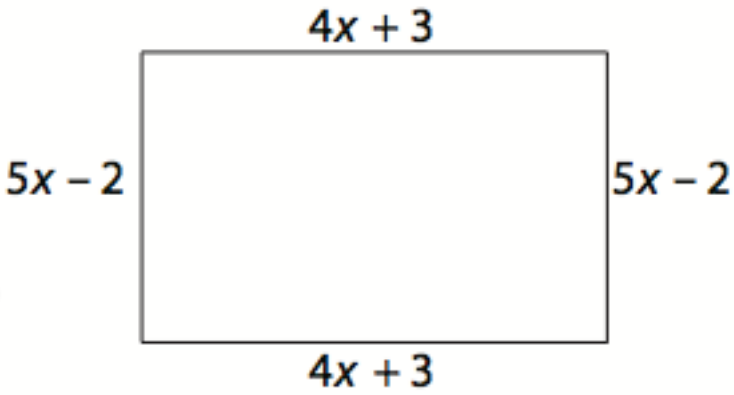
Don’t dis the CLAW.

The CLAW sees all.

Example four

What is the perimeter of the rectangle in simplest form?

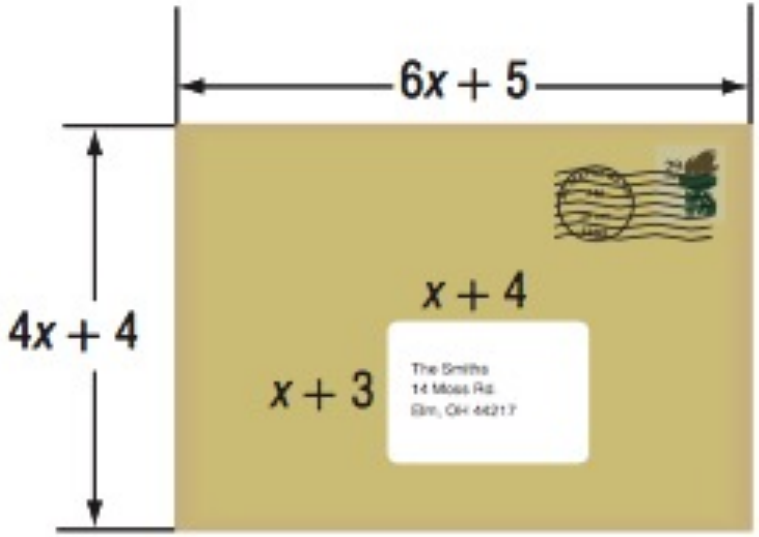
What is the area of the rectangle in simplest form?

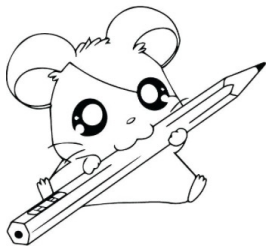


Example Five

Find the Area of the Label in terms of "x"

What is the Area of the envelope that is NOT covered by the label in terms of "x"?





THE END

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