What's Going On?

Checking In

Minds on Learning Goal Log

Action! Adding and Subtracting Polynomials

Consolidation Partner up!

Learning Goal - I will be able to add and subtract polynomials!

Checking In

Reminders

Tomorrow we will have our first "Friday Quiz"

You will write the quiz during RAFT. When you are done, you can read.

If you are truly understanding the material, it will take you less than 10 minutes.

Minds on

Learning Goal Log

Please choose a book off the back table.

Write your name on the front.

Do nothing else, yet.

Minds on

Learning Goal Logs

YESTERDAY'S!

February 4, 2014

Collecting Like Terms

Learning Goal: **I will be able to collect like terms and simplify algebraic expressions.**

Minds on

Learning Goal Logs

In the space under your Learning Goal **from yesterday** copy the expression below.

Then, below it, simplify the expression.

USE PENCIL

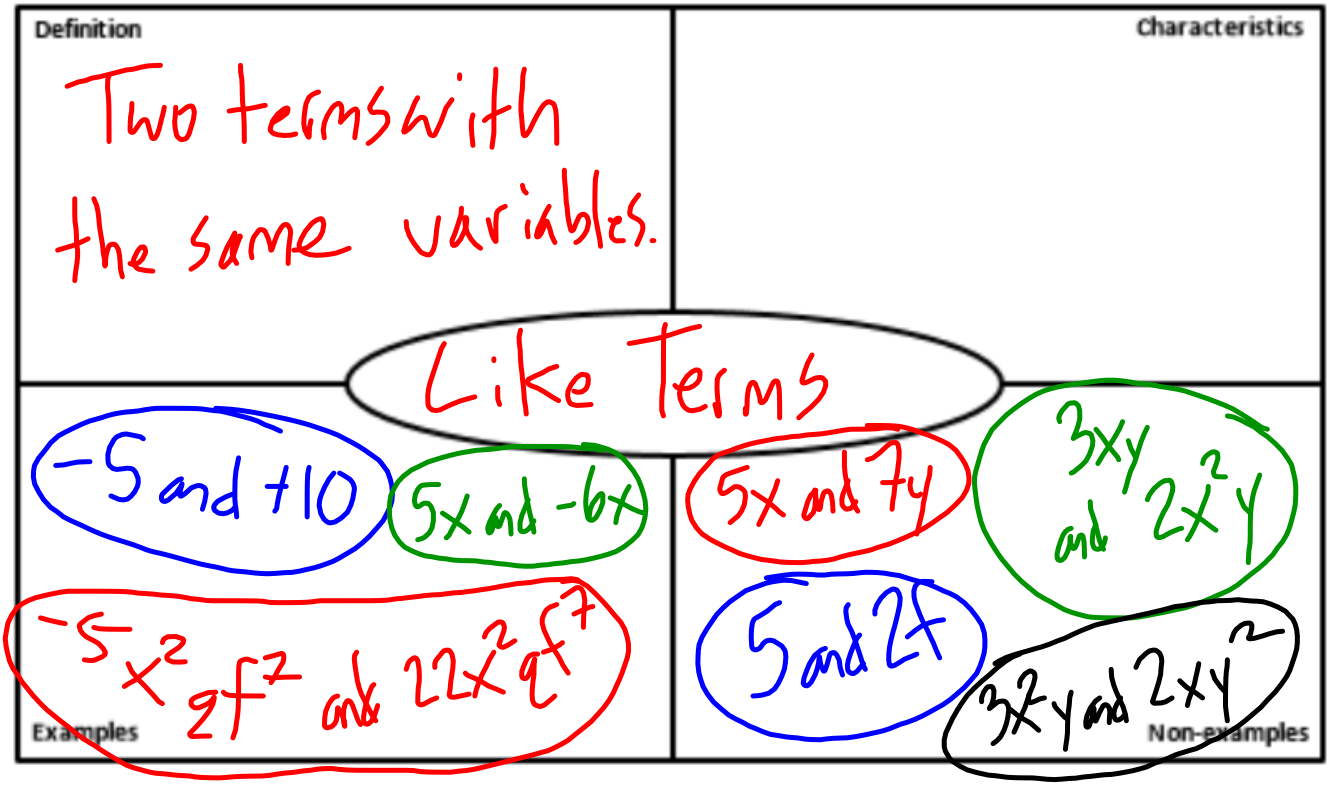
Simplify.

$9x^2y - 3x + 6y + 1 - 13x^2y + 16y - 18xy - 8$

$= -4x^2y - 3x + 22y - 7 - 18xy$

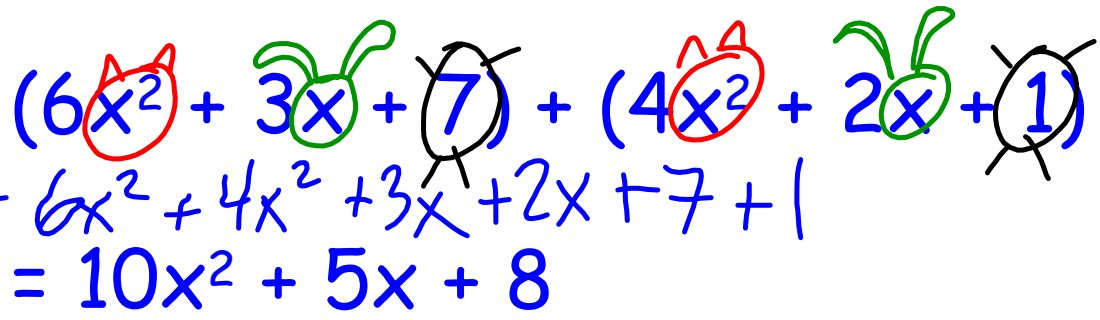
Minds on

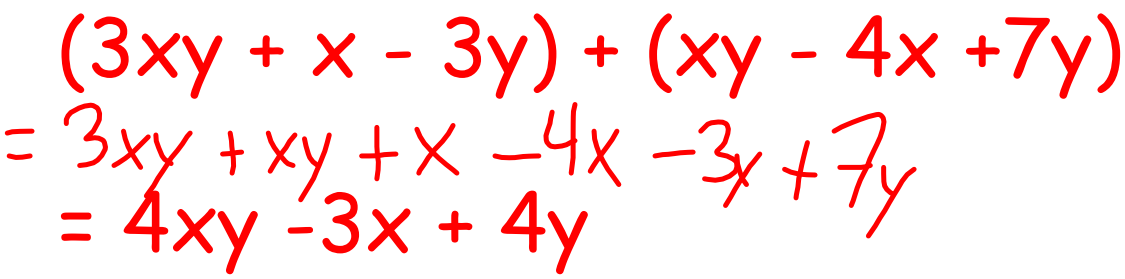
Frayer Model



Action!

Adding Polynomials





Action!

Adding Polynomials

Adding Polynomials

Easy!

1. Drop the brackets
2. Collect like terms
3. Simplify

Action!

Adding Polynomials

Adding Polynomials $(x^2 - 3x + 5) + (x^2 + 5x - 3)$

1. Drop the brackets

$= x^2 - 3x + 5 + x^2 + 5x - 3$

2. Collect like terms

$= x^2 + x^2 - 3x + 5x + 5 - 3$

3. Simplify

$= 2x^2 + 2x + 2$

Action!

Subtracting Polynomials

$(6x^2 + 3x + 7) - (4x^2 + 2x + 1)$

$= 2x^2 + x + 6$

$(3xy + x - 3y) - (xy - 4x + 7y)$

$= 3xy - xy + 1x + 4x - 3y - 7y$

$= 2xy + 5x - 10y$

Action!

Subtracting Polynomials

Subtracting Polynomials

Hard?

Nah. To subtract a polynomial, change the signs of EVERY TERM in the polynomial you're subtracting!

1. Change the signs of each term in polynomial your subtracting.

2. Collect like terms and simplify.

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

$$= 2x^2 - 4x + 2 - x^2 + 2x + 3$$

$$= 2x^2 - x^2 - 4x + 2x + 2 + 3$$

$$= x^2 - 2x + 5$$

Action!

Adding and Subtracting Polynomials

Subtracting Polynomials $(2x^2 - 4x + 2) - (x^2 - 2x - 3)$

1. Change the signs on each term in the polynomial you are subtracting.

$= 2x^2 - 4x + 2 - x^2 + 2x + 3$

2. Collect like terms

$= 2x^2 - x^2 - 4x + 2x + 2 + 3$

3. Simplify

$= x^2 - 2x + 5$

Consolidation

Partner up and simplify

a) $(3x + 5) + (8x - 3)$

$= 3x + 5 + 8x - 3$

$= 11x + 2$

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b) $(3x + 5) - (8x - 3)$

$= 3x + 5 - 8x + 3$

$= 3x - 8x + 5 + 3$

$= -5x + 8$

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c) $(6x^2 + 3x - 3) + (7x^2 - 3x + 8)$

$= 6x^2 + 3x - 3 + 7x^2 - 3x + 8$

$= 6x^2 + 7x^2 + 3x - 3x - 3 + 8$ (cancel)

$= 13x^2 + 5$

d) $(6x^2 + 3x - 3) - (7x^2 - 3x + 8)$

$= 6x^2 + 3x - 3 - 7x^2 + 3x - 8$

$= 6x^2 - 7x^2 + 3x + 3x - 3 - 8$

$= -x^2 + 6x - 11$

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e) $(4a^2 + 2a + 3) + (3a^2 - 4a - 4) - (5a^2 + 3a - 6)$

$= 4a^2 + 2a + 3 + 3a^2 - 4a - 4 - 5a^2 - 3a + 6$

$= 2a^2 - 5a + 5$

Consolidation

Homework!!!

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