Activator

Can you expand integers (numbers)? Yes

Multiply (74)(392) = 29008

Multiply (70+4)(300+90+2) = 29008

Same or different answers? Same

What is the "Box Method?"

It is a way to multiply WITH VARIABLES.

Why is the method used? to double distribute

Get colored sheets from the table.

Today's Objective

Unit 7
Lesson 1

Students will be able to use the box method and combine like terms.

Announcements

Multiply using the "Box Method"

	300	+90	+2
70	+ 21,000	+ 6,300	+ 140
+4	+ 1,200	+ 360	+8

There must be a sign in every box.

Write down all of the boxes.

21,000 + 6,300 + 140 + 1,200 + 360 + 8 is 29,008

Combine like terms

Definition

To put together when the variable(x) and exponent are the same.

Facts

- Used only with Add and Subtract
- The exponent does NOT change.

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Lesson 7.1

Combine Like Terms (CLT)

Example(s)

$$4x^2 + 3x^2 = 7x^2$$

Same variable and the same exponent.

Non-Example(s)

$$4x^2 + 3x^3$$

Not the same exponent

$$4x^2 + 3y^3$$

Not the same variable

Check for Understanding (3 of 4)

RED= No,   YELLOW= Yes,   BLUE= Question

Like Terms?

$x^2 + 4x^2$ Yes, Why? Same exponent and Same variable

2x + 3x^2 No, Why? Not the same exponent

2x + 3y No, Why? Not the same variable

Combine Like Terms

Will the answer have an equal sign? No

Why? No equal sign in the question.

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Lesson 7.1

Line 1: $(7x^3 + 3x^2)$ - $(9x - 5x^2)$

⬅ Distribute

Line 2: $7x^3 + 3x^2 - 9x + 5x^2$

⬅ Commute

Line 3: $7x^3 + 3x^2 + 5x^2 - 9x$

⬅ Combine

Line 4: $7x^3 + 8x^2 - 9x$ Like Terms

Group Work Questions

Directions: All groups, please do all of the questions. Use your notes from last class to help you. [Ask 2 people before you ask me.]

Last time, we did Lesson 7.1 Notes.

3rd Stop @ 10:06

2nd Stop @ 9:03

8th Stop @ 2:25

*One person from each group will present one question.

Work Period

If A=($2x^2 + 6x + 5$) and B=($6x^2 + 3x + 5$), what is A-B?

($2x^2 + 6x + 5$) - ($6x^2 + 3x + 5$)

Distribute

$2x^2 + 6x + 5 - 6x^2 - 3x - 5$

Commutative

$2x^2 - 6x^2 + 6x - 3x + 5 - 5$

$-4x^2 + 3x + 0$

Combine like Terms

$-4x^2 + 3x$

Exit Ticket

What is the sum of $8x^2$ - x + 4 and x - 5 ?

$(8x^2$ - x + 4) + (x − 5)

$8x^2$ - x + 4 + x - 5   ← Distribute

$8x^2$ + 0x - 1   ← Combine like Terms

$8x^2$ - 1