SSR

Read at a Level 0 until 9:15

Nov 6-10:33 PM

Simplifying Expressions Opener

Solve:

1. -5 + (-6)(3) − 10

$-5 + {-18} - 10$

$-23 - 10$

$-23 + {-10} = -33$

2. $\frac{-5+12}{-21} \rightarrow \frac{7 \div 7}{-21 \div 7} = \frac{1}{-3}$

3. A pair of boots regularly priced $129.99 was marked down to $35.99 during the end of season sale. What is the percent of discount?

$.\% \times op = np$

$\frac{.\% \times 129.99}{129.99} = \frac{35.99}{129.99}$

$.\% = 28 \quad 28\% \rightarrow 72\%$

4. What do you think an "expression" is in math?

Sep 7-9:22 AM

Learning Target

I can simplify an expression by combining like terms.

Nov 19-9:52 AM

expression

An expression is a combination of ⬜⬜⬜ , ⬜⬜⬜ and ⬜⬜⬜ .

Parts of an Expression:

$$2x + 3y - 4x^2 + 10$$

TERMS	CONSTANT	COEFFICIENT	LIKE TERMS
Numbers and/or variables seperated by +/− 2x, 3y, -4x², 10	number that stands alone 10	Number in front of a variable + Constant 2, 3, -4, 10	terms with the same variable N/A

May 28-9:00 AM

simplify

Simplify means to [____] like [____] reduce all [____]

Combine Like Terms

1. Must have the same [____]... not x and xy.
2. Must have variable raised to same [____]... not x and x².
3. Numbers by themselves [____] are always added together.
4. When identifying like terms, circle the [____] AND the [____] in front of it.
5. Integers are key component here - you must follow integer operation rules - ALWAYS!!

Collect your like terms: (move terms below to group by like variable)

-2x -4x   + 3y -9y   + 2x²

‾6x   ‾6y   + 2x²

$$-6x - 6y + 2x^2$$

Nov 19-9:59 AM

Real World Example...

$$+$$

$$\neq$$
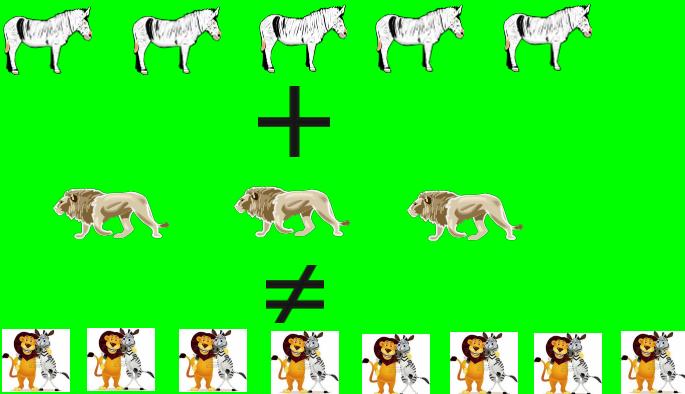
Mathematically:

5Z + 3L ≠ 8ZL   5z + 3z = 8z

Two different
variables here.

Same variables here.
Add coefficients.

Nov 19-10:04 AM

Simplify each expression below.

$3x^2 + 6y + 7y - 3x^2$ $3x + 2y - 2x + 5y$

13y ANSWER

$\dfrac{x^2}{3x^2-3x^2}$ $\dfrac{y}{6y+7y}$

0   13y

$7y + x$

x + 7y ANSWER

$+2y+5y$ $3x-2x$

$7y$ $1x$

$4a^2 - 3b^2 + 4b + 10a^2$ $-3x + 5x - 2y + 5x$

14a² - 3b² + 4b ANSWER

a^2 b^2 b

$4a^2+10a^2$ $-3b^2$ $+4b$

$14a^2-3b^2+4b$

$-3x+5x+5x$

$2x+5x$

$=7x$

ANSWER **7x - 2y**

x $\dfrac{y}{-2y}$

$\dfrac{-3x+5x+5x}{2x+5x}$

$7x$

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Edit

Q.5

Simplify:
6x + 9xy - 4y + 2z

A 6x + 9xy - 4y + 2z

C 11xy + 2z

B -5xy - 2z

D 13xyz

Nov 19-10:16 AM

4

Summary

On the back of your opener with your table....

1. Write one PAIR of terms that are considered like

2. Write one PAIR of terms that are NOT considered like

Nov 19-9:52 AM

May 28-8:43 AM