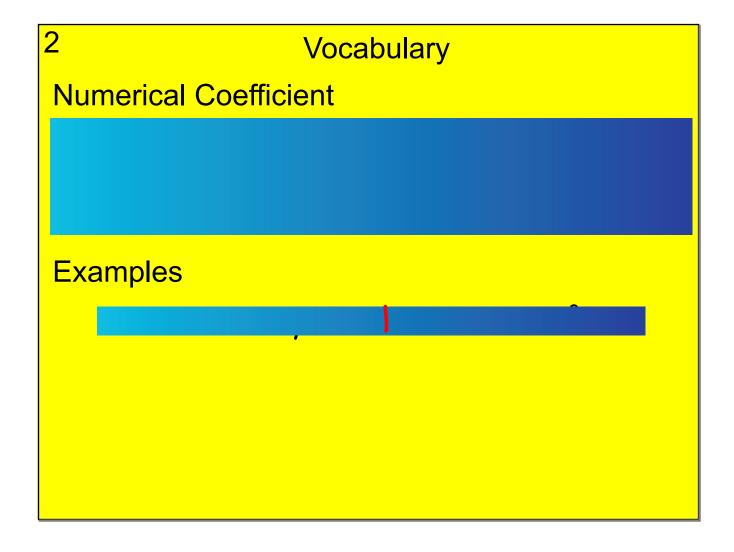


1 Integer warm-up:

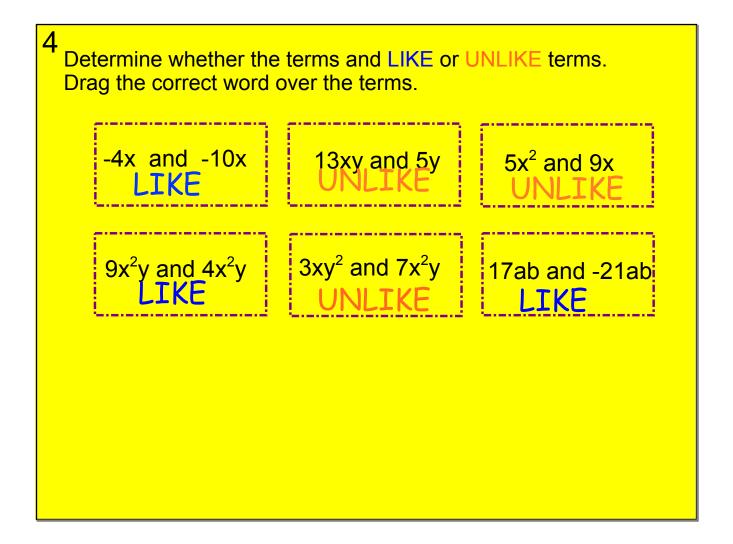
$$-8+5=-3 -3+7=-10 5+(16)=-11$$

$$12-13=-1 12+6=18 -8-9=-11$$

$$-9-(-8)=-1 13.21=-8$$



3	Vocabulary
Like Terms	
Examples	



⁵ Combining Like Terms- Important Note

REMINDER: The <u>Subtraction</u> sign is the same as adding a <u>Megative</u>.

Examples

 $\frac{4x-9}{4x-9}$ becomes $\frac{4x+9}{4x-9}$ as an addition problem so the subtraction symbol tell you that the 9 is negative.

 $\frac{50-4}{50-4}$ becomes $\frac{50+(-4)}{20}$ as an addition problem so the subtraction symbol tell you the 4 is negative.

6 Simplifying Expressions by Combining Like Terms

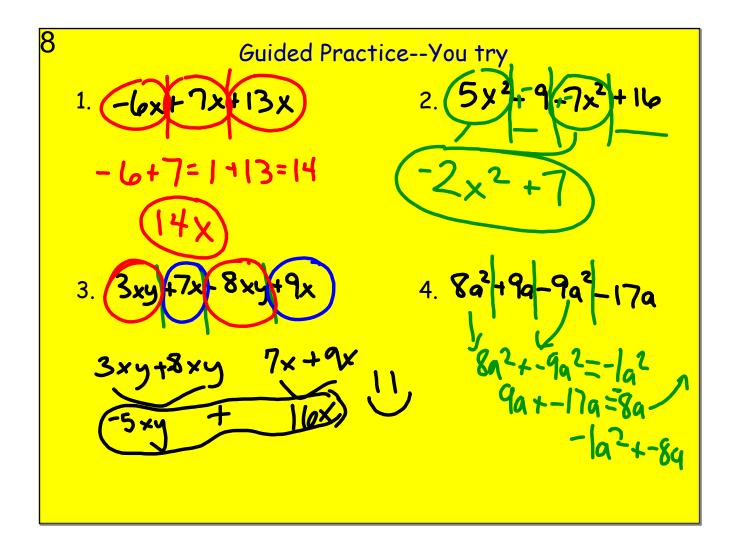
You can combine like terms by adding their numerical coefficients.

Examples

1.
$$5x + 9x - 12x$$

7

More Examples



Work with your partner to complete the following problems.

The expressions on the right have had their like terms combined. Match each expression on the left with an expression on the right. When done move the red check inside the green box to reveal the answers.

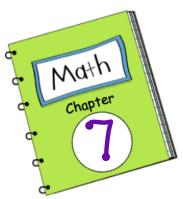


a.
$$5x^2y + 2xy^2$$

c.
$$3x + 9y$$

a
$$7x^2y - 2x^2y + 5xy^2 - 3xy^2$$
 e. $-2x + 9y$

$$e. -2x + 9y$$



TTTLE: Linear Expressions

Date	Lesson	Topic/Assignment
Feb 8	I	Distributive Property Video Notes
Feb 9	i	HOMEWORK: pg295
Feb 10	2	Simplifying Algebraic Expressions Video Notes



Name______ Due Date _____

Lesson 2 Homework Practice Simplifying Algebraic Expressions

Identify the terms, like terms, coefficients, and constants in each expression.

1.
$$-21w + 5 + 3w - 1$$

2.
$$f - 3fg + 2g - fg + 1$$

Terms:

Terms: :_____

Like terms: :_____

Like terms: :_____

Coefficients: :

Coefficients::

Constants: :_____

Constants: :_____

Simplify each expression.

3.
$$-8q + 6 + 5q - 3$$

4.
$$h + 5h - 3 - 6h$$

$$\begin{array}{c}
5. & 2a - 5(a + 1) \\
2q + (-5)(a + 1) \\
2q + -5q + -5 \\
-3q - 5
\end{array}$$

6.
$$b-2(b-2)$$

 $b+-2(b+-2)$
 $b+-2b++4$

7.
$$9-t-3(t+3)$$

8.
$$-8 + 5(g + 2) - 2$$

9.
$$12m + 9 - 2m - 16$$

10.
$$4(y-3)+9-3y$$

11.
$$r+r+r+r+r$$

12.
$$-14y + 12(x + y) - 12x$$

13.
$$19g - 4h + 4 - 20(g - 1)$$

14.
$$-55n + 28n + 21n + 7n - n$$

15.
$$-12z + 4(z - 9) + 30 + z$$

For each situation, write an expression in simplest form that represents the total amount.

16. You bought 3 pieces of chicken that cost x dollars each, a salad for \$3, and a drink for \$1.

17. Sal has scored g goals this season. Ben has scored four times as many goals as Sal. Chun has scored three fewer goals than Ben.