

11-20-17

Aim: SWBAT simplify expressions.

HW: Worksheets

Quiz Tomorrow

Do Now: Rearranging into standard form.

HOMEWORK - SIMPLIFYING EXPRESSIONS

Given the expression: $9x^2 + 11x - 12 - 5x^2 + 3x - 8$

- 1) How many terms are in this expression? 6
- 2) State the coefficient of the fourth term. -5
- 3) State the coefficient of the second term. 11
- 4) Name the constant term(s). -12 and -8
- 5) State a like term for the first term. $-5x^2$
- 6) State a like term for the second term. $3x$
- 7) State a like term for the third term. -8
- 8) I know an expression is in simplest form when it has:

no parentheses
no like terms

Simplify each expression.

9) $-7(x - 8)$

$-7x + 56$

10) $9(2x + 8)$

$18x + 72$

11) $-3(-8x + 12)$

$24x - 36$

12) $5(-8x + 10)$

$-40x + 50$

13) $y(4x - 7)$

$4xy - 7y$

14) $-(6x - 13)$

$-6x + 13$

15) $6(x + 2) + 8x$

$6x + 12 + 8x$

$14x + 12$

16) $18y + 5(7 + 3y)$

$18y + 35 + 15y$

$33y + 35$

17) $-(x + 2) - 8x$

$-x - 2 - 8x$

$-9x - 2$

18) $-7x^2 - 2x - 8x^2 + x$

$-15x^2 - x$

19) $-16mn + 4m + 2mn - m$

$-14mn + 3m$

20) $-30xy - 5x + 2xy - 7x$

$-28xy - 12x$

Rearrange to put the answers in their best form.

1. $-40 + 8x$

$$8x - 40$$

2. $12z + 16w$

$$16w + 12z$$

3. $-108 - 12y$

$$-12y - 108$$

4. $6b + 5a$

$$5a + 6b$$

5. $95 + 19w$

$$19w + 95$$

6. $-3 + 5x + 3y$

$$5x + 3y - 3$$

7. $-9y - 3x$

$$-3x - 9y$$

8. $2s + 4r$

$$4r + 2s$$

9. $6 + 2x$

$$2x + 6$$

10. $s + 4r$

$$4r + s$$

HOMEWORK - SIMPLIFYING EXPRESSIONS BY COMBINING LIKE TERMS

Simplify each expression by combining like terms.

Same Signs - _____

Different Signs - _____

1) $4a + 3a$

2) $-9x + 2x$

3) $-5m - m + 7$

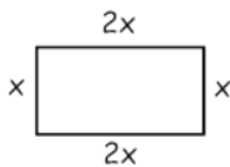
* 4) $-6x^2 - 3x^2 - 4x - 9x$ 5) $13xy - 17 + xy - 1$ 6) $4a - 3c - 7a - 3c$

7) $-x - 2y - 8x - 2y$

8) $7x + 11xy + x + 9$

9) $mn + 4m + 6n + 2mn$

- 10) Find the perimeter of the rectangle in simplest form. (Remember, perimeter is the distance around the outside of a polygon.)



$$P = 2x + 2x + x + x$$

$$P = 6x \text{ units}$$

HOMEWORK - SIMPLIFY EXPRESSIONS

Simplify each expression.

1) $-3(2x - 4)$

2) $-5(-8x - 2y + 4)$

3) $-4(2x - 6) - 7x - 5$

4) $-7(-2 + 4x) - 13x + 25$

5) $-3(-7x + 5) - 2(3x - 6)$

6) $-5(-3x - 12) - (2x + 14)$

$$\boxed{15x} + \boxed{60} - \boxed{2x} - \boxed{14}$$

$$13x + 46$$

7) $-10(-5x + 8) - 15 + 25x$

8) $-50x - 3(7x - 25) + 50x$

$$\boxed{-50x} - \boxed{21x} + \boxed{75} + \boxed{50x}$$

$$-21x + 75$$

9) Find the ⁺sum of $(5x - 12)$ and $(14x - 13)$

$$(5x - 12) + (14x - 13)$$

$$\boxed{5x} - \boxed{12} + \boxed{14x} - \boxed{13}$$

$$19x - 25$$

10) Find the ⁻difference of $(7x + 9)$ and $(15x - 19)$

$$(7x + 9) - (15x - 19)$$

$$\boxed{7x} + \boxed{9} - \boxed{15x} + \boxed{19}$$

$$-8x + 28$$