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.

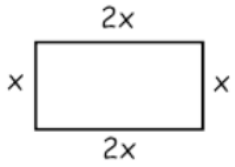
Same Signs - _____ Different Signs - _____

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.)



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

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

$15x + 60 - 2x - 14$

$13x + 46$

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

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

$-50x - 21x + 75 + 50x$

$-21x + 75$

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

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

$5x - 12 + 14x - 13$

$19x - 25$

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

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

$7x + 9 - 15x + 19$

$-8x + 28$