Math 1

Adding and Subtracting Polynomials Review!

Important Vocabulary

Monomial:	
Polynomial:	
Degree of a Polynomial:	The _____ of all the exponents within the polynomial.
Standard for of a Polynomial:	

Classifying Polynomials

Polynomial	Degree	Number of Terms	Term Name
6			
$5x + 9$			
$4x^2 + 7x + 3$			
$2x^3$			
$8x^4 - 2x^3 + 3x$			

Write each polynomial in standard form. What is the name of the polynomial based on its number of terms?

a) $3x + 4x^2$

b) $4x\text{-}1+5x^3 + 7x$

c) Write $2x - 3 + 8x^2$ in standard form. What is the name of the polynomial based on its degree and number of terms?

d) How does writing a polynomial in standard form help you name the polynomial?

To ADD – combine like terms

1. $(4a^2 + 7a - 12) + (9a^2 - 6 + 2a)$

2. $(3a^2 - 3ab - b^2) + (4ab + 6b^2)$

To SUBTRACT – distribute a –1 then combine like terms

3. $(6a^2 - 8a + 12b^3) - (-11a^2 + 6b^3)$

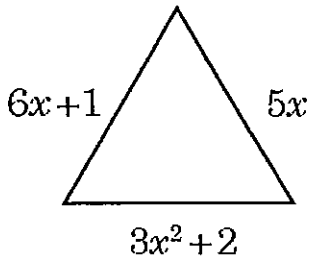
4. $(7a - 10b) - (3a + 4b)$

5. $7p - (9p + 3w)$

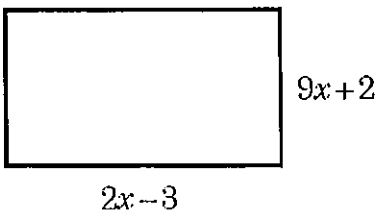
6. $(12x - 19y) - 10y$

Application – Perimeter of Figures

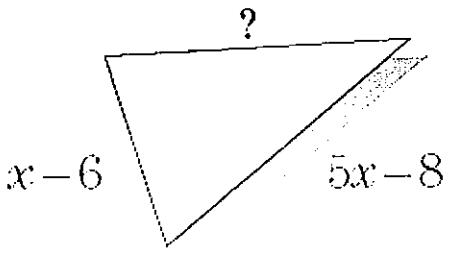
7. Find the perimeter of the triangle below.



8. Find the perimeter of the rectangle below.



9. If the perimeter of a triangle is 8x – 11, what is the length of the missing side of the triangle?



Agenda: (1) 7.1 Notes, (2) Test Corrections/HW (3) EOC PREP

Math 1

7.1 Adding and Subtracting Polynomials Review!

Unit 7

Important Vocabulary

Monomial:	Contains one term Ex: $3xy$
Polynomial:	Contains two or more terms Ex: $2x + y$
Degree of a Polynomial:	The highest exponent of all the exponents within the polynomial.
Standard form of a Polynomial:	Written highest to lowest exponent

Classifying Polynomials

Polynomial	Degree	Number of Terms	Term Name
6	0	1	Monomial
$5x + 9$	1	2	Binomial
$4x^2 + 7x + 3$	2	3	Trinomial
$2x^3$	3	1	Monomial
$8x^4 - 2x^3 + 3x$	4	3	Trinomial

Write each polynomial in standard form. What is the name of the polynomial based on its number of terms?

a) $3x + 4x^2$

$4x^2 + 3x$ (Binomial)

b) $4x-1+5x^3 + 7x$

$5x^3 + 11x - 1$ Trinomial

c) Write $2x - 3 + 8x^2$ in standard form. What is the name of the polynomial based on its degree and number of terms?

$8x^2 + 2x - 3$ Degree (2) → Quadratic Trinomial

d) How does writing a polynomial in standard form help you name the polynomial?

You can see how many terms there are total

To ADD – combine like terms

1. $(4a^2 + 7a - 12) + (9a^2 - 6 + 2a)$

$13a^2 + 9a - 18$

2. $(3a^2 + 3ab - b^2) + (4ab + 6b^2)$

$3a^2 + ab + 5b^2$

$x^2 + 2x + 3x^2 - 3x$

$6y^2 + 2xy - 4xy + 2y^2$

To SUBTRACT – distribute a –1 then combine like terms

3. $(6a^2 - 8a + 12b^3) - (-11a^2 + 6b^3)$

$6a^2 - 8a + 12b^3 + 11a^2 - 6b^3$

$17a^2 - 8a + 6b^3$

4. $(7a - 10b) - (3a + 4b)$

$7a - 10b - 3a - 4b$

$4a - 14b$

5. $7p - (9p + 3w)$

$7p - 9p - 3w$

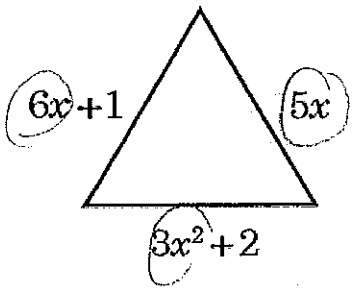
$-2p - 3w$

6. $(12x - 19y) - 10y$

$12x - 29y$

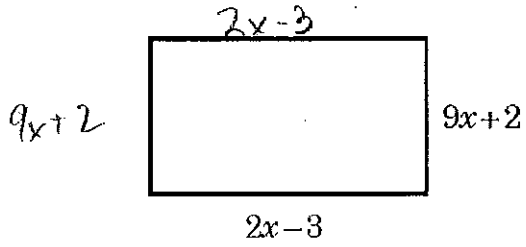
Application – Perimeter of Figures

7. Find the perimeter of the triangle below.



$3x^2 + 11x + 3$

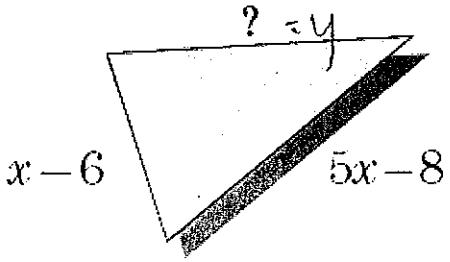
8. Find the perimeter of the rectangle below.



$2x - 3 + 2x - 3 + 9x + 2 + 9x + 2$

$22x - 2$

9. If the perimeter of a triangle is $8x - 11$, what is the length of the missing side of the triangle?



$8x - 11 = 5x - 8 + x - 6 + y$

$-6x \quad +14 \qquad 6x - 14$

$2x + 3 = y$