Curriculum Outcome

- [x] (PR 5)Demonstrate an understanding of polynomials (limited to of degree less than or equal to 2).
- [x] (PR 6) Model, record and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially and symbolically (limited to polynomials of degree less than or equal to 2).
- [ ] (PR 7) Model, record and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially and symbolically.

Student Friendly:
“Mid unit review.....Getting ready for a major quiz! "

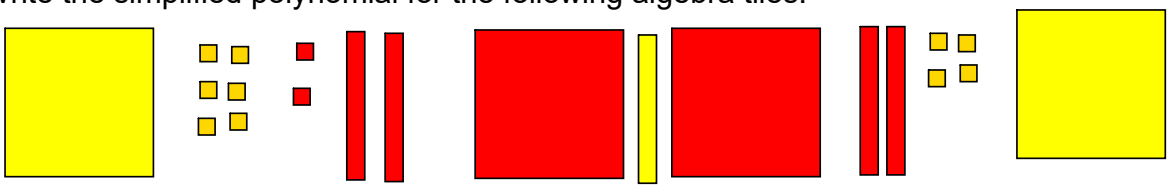
Warm Up

1)

	$3b^4 - 6$	$2r^8 - 3p + 7$	$-13z$	$\frac{5}{2x}$	2
# of terms					
Coefficients					
Constant					
Variable					
Degree					

Warm Up

2) Write the simplified polynomial for the following algebra tiles.



3) Simplify

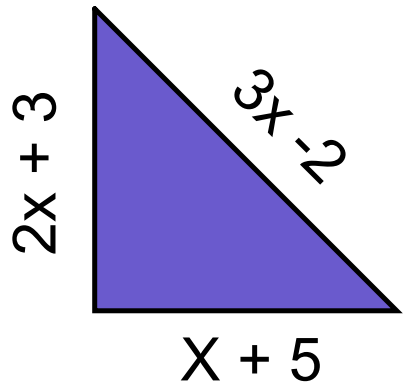
a) $(12t^2 + 5t - 6) + (-4t^2 - 8t + 11)$

b) $(-9n^2 - 5nx + 13n) - (2n^2 - 5nx + 6n)$

Warm Up

4a)

Determine the perimeter of this triangle



b) What is the perimeter if x = 6

Warm Up

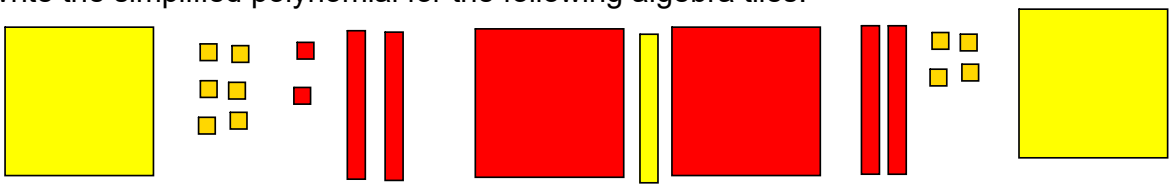
1)

	$3b^4 - 6$	$2r^8 - 3p + 7$	$-13z$	$\frac{5}{2x}$	2
# of terms	2	3	1	∅	1
Coefficients	3	2, -3	-13	∅	∅
Constant	-6	7	∅	∅	2
Variable	b	r , p	z	x	∅
Degree	4	8	1	∅	0

Warm Up

Write the simplified polynomial for the following algebra tiles.

2)



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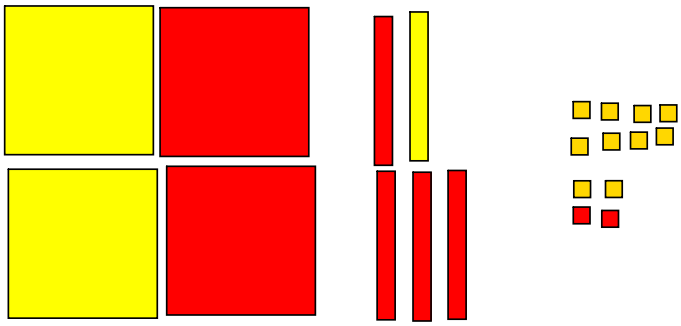

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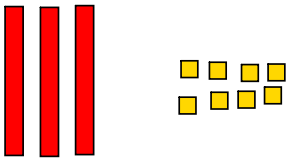


-3x +8

Warm Up

3) Simplify

a) $(12t^2 + 5t - 6) + (-4t^2 - 8t + 11)$

$12t^2 + 5t - 6 - 4t^2 - 8t + 11$

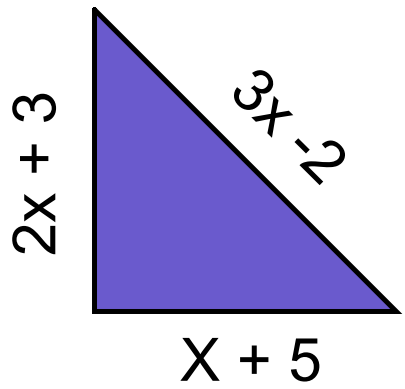
$12t^2 - 4t^2 + 5t - 8t - 6 + 11$

$8t^2 - 3t + 5$

Warm Up

4a)

Determine the perimeter of this triangle



P = (2x + 3) + (x + 5) + (3x -2)

P = 2x + 3 + x + 5 + 3x -2

P = 2x + x + 3x + 3 + 5 -2

P = 6x + 6

b) What is the perimeter if x = 5

P = 6x + 6

P = 6(5) + 6

P = 30 + 6

P = 36

Monomials...

Monomials are polynomials with ONE term.

14

x

$11y^2$

Ellen's Monologue

"Terms are numbers, variables, or the product of numbers and variables

→ no addition or subtraction

Binomials...

Binomials are polynomials with TWO terms.

$7x + 3$

$12y - x$

$13x^2 + x$

Terms are separated by "+" and "-" signs!

Trinomials...

Trinomials are polynomials with THREE terms.

$-6x + 7y - 2$

$7x^2 + 8x + 7$

$8 + 5m - 7m^2$

Review

Terms with polynomials

Monomial: one term

Binomial: two terms

Trinomials: three terms

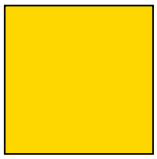
Variables: Letters

Coefficients: Numbers out in front of letters

Constant: the number all by itself

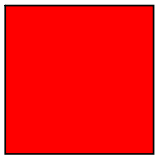
Degree: the highest exponent on a variable

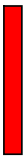
Unshaded



Area

Shaded





Polynomials are written in descending order.

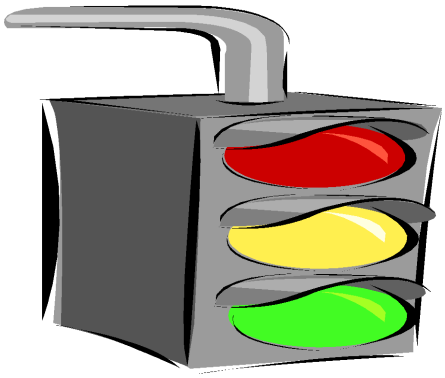
Each term is written from the highest degree to the lowest.

example:

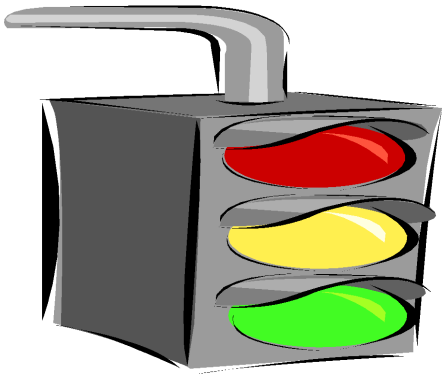
$$5x^3-3x^4-x+7+4x^2$$

will be written as...

$$-3x^4 + 5x^3 + 4x^2 - x + 7$$



Now it is time for Home Learning



Quiz Next Class
So Please
Review ALL
Lessons

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QUESTIONS

(Mid Unit Review)

#1
#2
#3
#4(a,c)
#6
#9 b,d, g(just simplify)
#10 bd (no tiles)
#11
#12a

Plus Extra Practice Worksheets

Name: _____

Four Digit Number for
Marks: _____

1) Complete the chart:

	Type	Variable	Coefficient	Degree	Constant
i) $2x^6 - 5$					
ii) $6p^3 - 7y^2 + 1$					
iii) -13n					

2) Write the following polynomial in proper order

$$9x^7 - 3x^{12} + 5x^9 - 6x^{11} - 11$$

Answer: _____

3) Sketch the following polynomials using algebra tiles:

a) $-3x^2 - 5x + 4$

4) Simplify the following (Show all work!)

a) $5x^2y^2 - 2xy - 6x - 7 + 8x^2y^2 + 2xy - 3x + 6$

b) $(2x^2 - 7x + 5) + (-8x^2 + 12x - 9)$

Name: _____ Warm- Up Quiz **Four Digit Number for Marks:** _____

1) Complete the chart:

	Type	Variable	Coefficient	Degree	Constant
i) $2x^6 - 5$					
ii) $6p^3 - 7y^2 + 1$					
iii) $-13n$					

2) Write the following polynomial in proper order

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Answer: _____

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b) $(2x^2 - 7x + 5) + (-8x^2 + 12x - 9)$