Curriculum Outcome

- (PR 5)Demonstrate an understanding of polynomials (limited to of degree less than or equal to 2).
- (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:
“Understanding the composition of a polynomial."

Warm Up

Copy warm-ups into your notebooks

1) Classify the following polynomials as either monomials, binomial or trinomial

_____ $9x^2y$

_____ 11

_____ $k - 7 + b$

$v + 2t$ _____

n _____

$3 + g^{10}$ _____

2) What is the degree of the following polynomial?____ _____

$$8x^5 - 6 + 10x - 9x^{15} + 10x^{14}$$

3) Rewrite the above in descending order

4) Fill in the following chart:

Expression	Variable	Coefficient	Constant	Degree
$2x - 8$				
$5x^4 + 7y - 2$				
12				

Warm Up

Copy warm-ups into your notebooks

1) Classify the following polynomials as either monomials, binomial or trinomial

Mono	$9x^2y$	$v + 2t$	bi
mono	11	n	mono
Tri	$k - 7 + b$	$3 + g^{10}$	bi

2) What is the degree of the following polynomial? 15

$$8x^5 - 6 + 10x - 9x^{15} + 10x^{14}$$

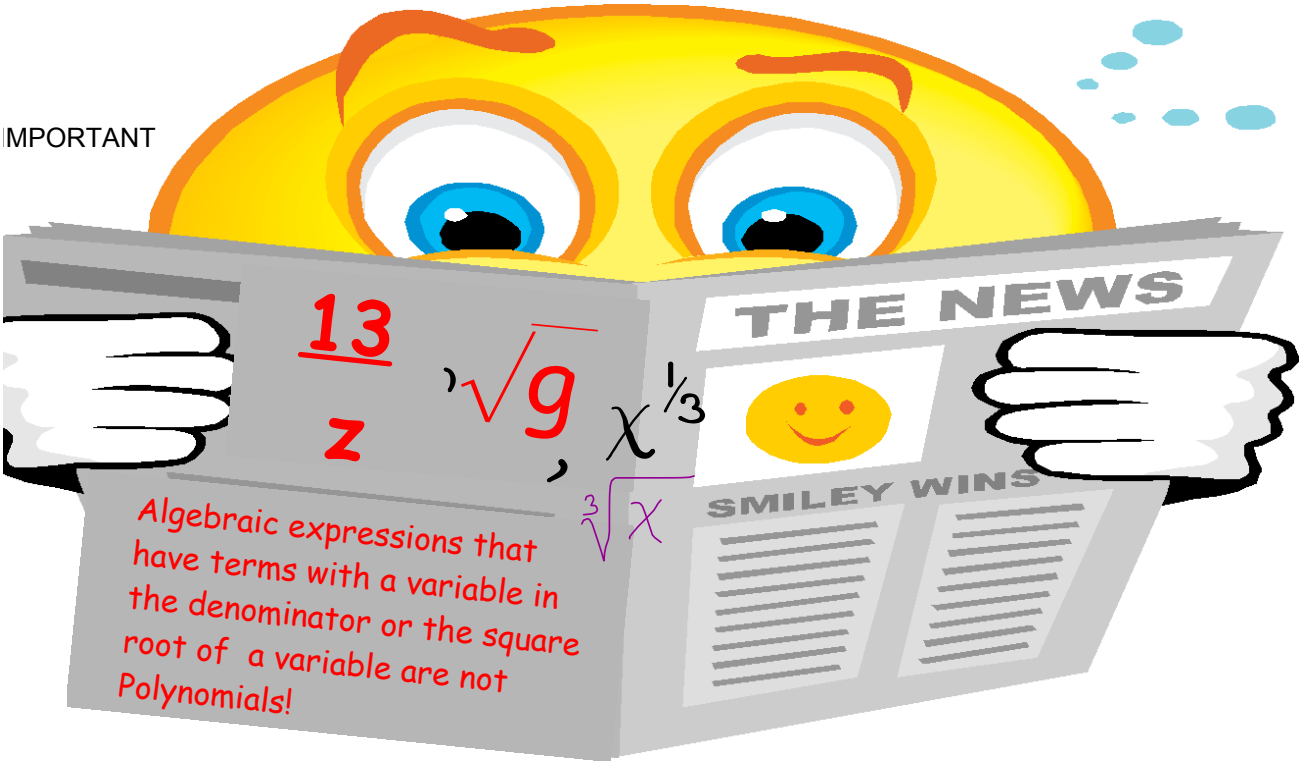
3) Rewrite the above in descending order

$-9x^{15} + 10x^{14} + 8x^5 + 10x - 6$

4) Fill in the following chart:

Expression	Variable	Coefficient	Constant	Degree
2x - 8	x	2	-8	1
$5x^4 + 7y - 2$	x, y	5, 7	-2	4
12	∅	∅	12	0

IMPORTANT



Which are polynomials?

1) $\sqrt{x}$ Not

2) $\frac{3}{4}y$ Yes

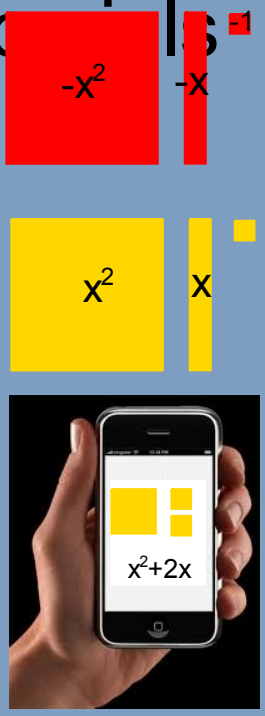
3) x^2+1 Yes

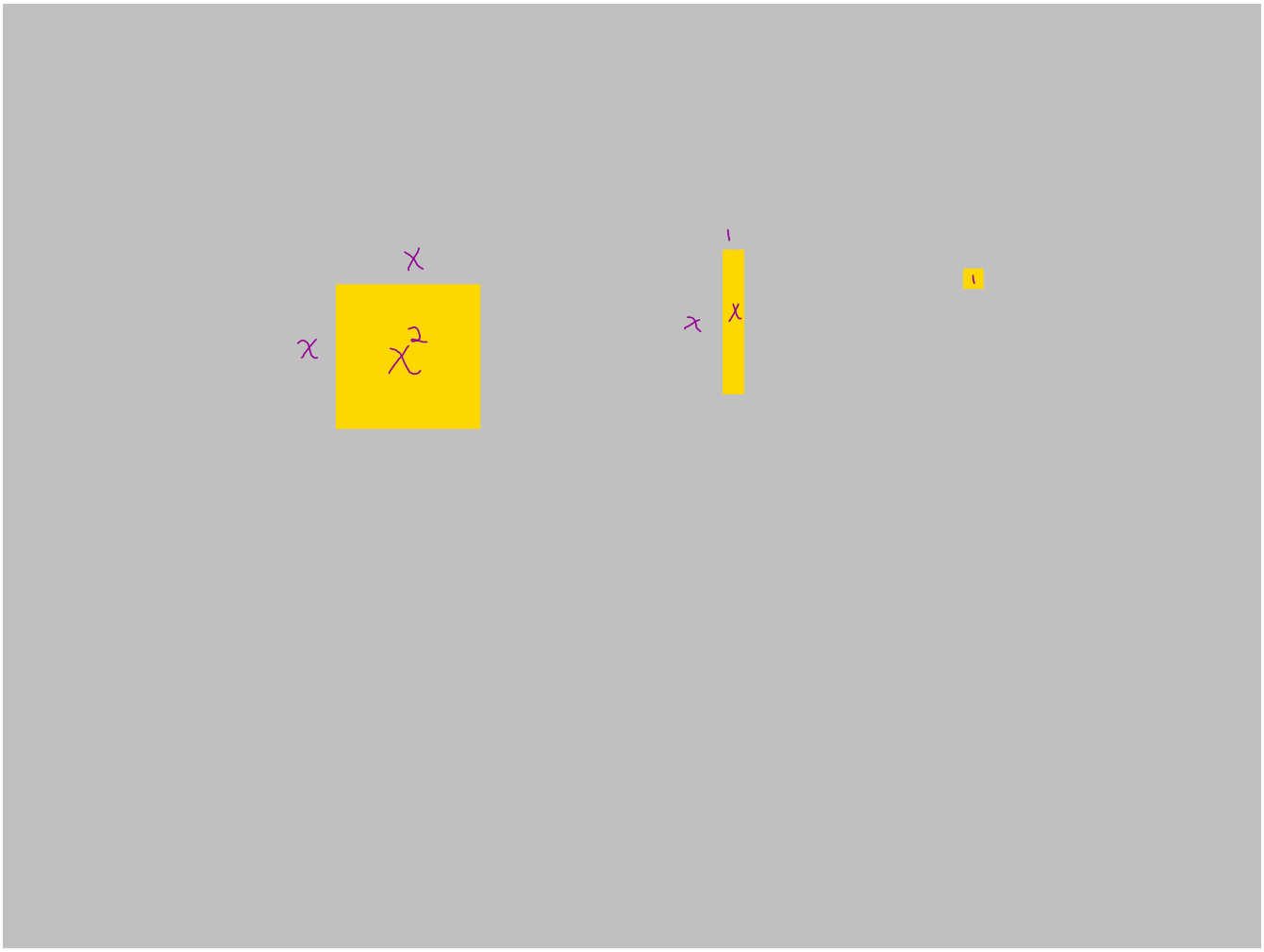
4) $\frac{3}{t}$ Not

Modelling Polynomials

3x+4

$2x^2-4x+2$

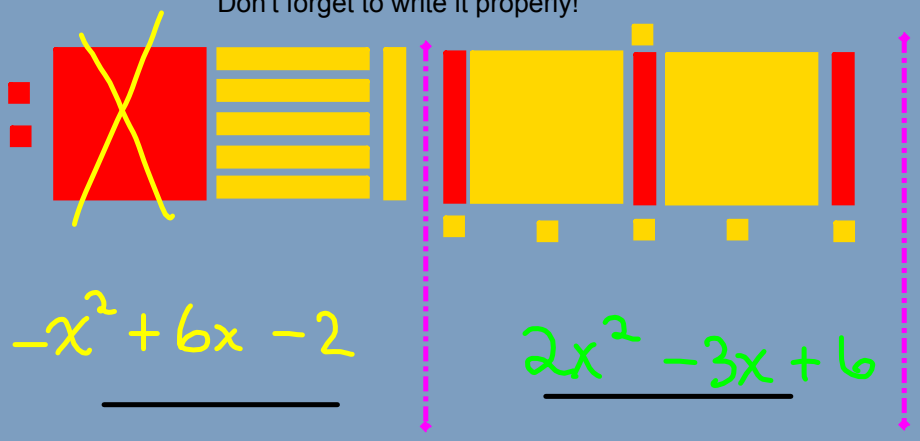



x
x
x^2
1
x
x
1

Modelling Polynomials

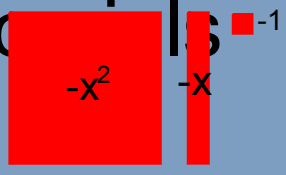
Write the algebraic expression that represents each model.

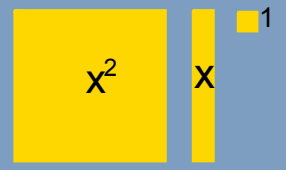
Don't forget to write it properly!

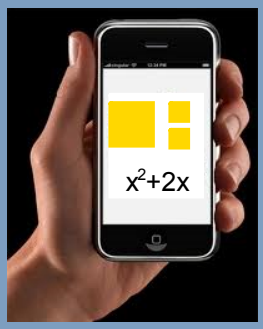


$-x^2+6x-2$

$2x^2-3x+6$



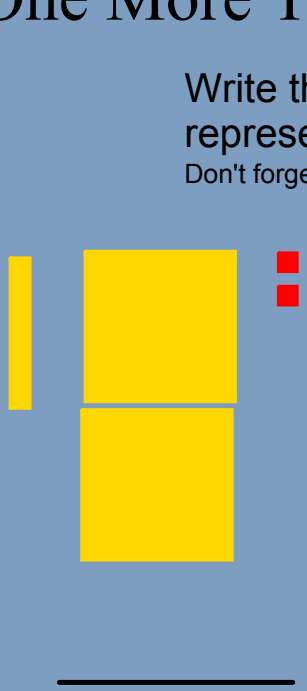


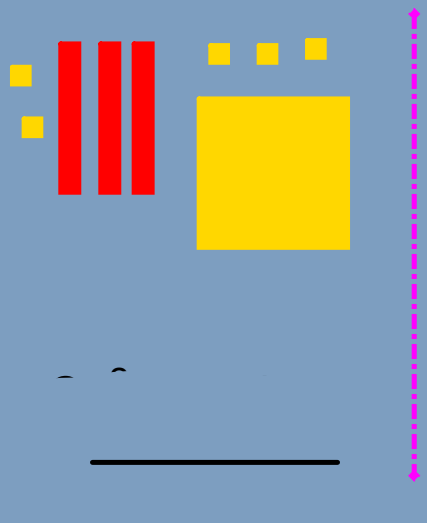


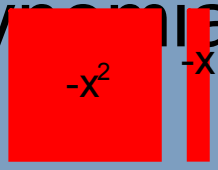
One More Time Modelling Polynomials

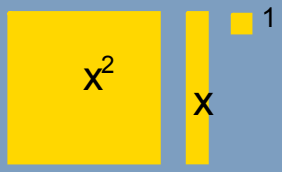
Write the algebraic expression that represents each model.

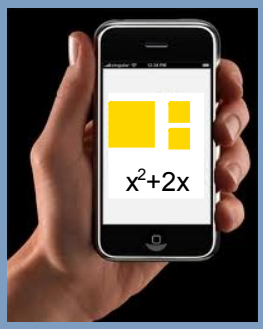
Don't forget to write it properly!







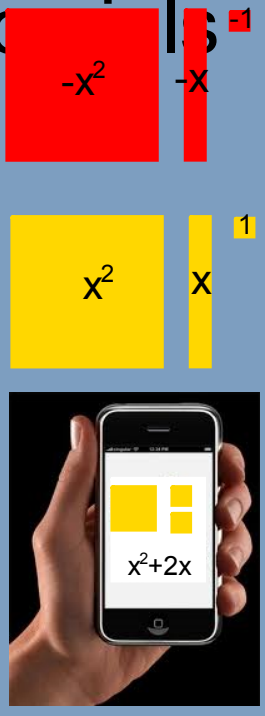




Modelling Polynomials

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

$x^2 - x + 1$



Terms with polynomials

Remember:

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

Class/ Homework

Check out pages 214 - 216

4

5

6

7

8 (hint write all in descending order)

9 (set up a chart)

10

11 abc

12 (Sketch the tiles and put expression beside it)

13 adeh (Sketch the tiles and put expression b

14 ac