Introducing Polynomials

Using Page 253 in your Text book complete the following **red**

blue

[ ] Represents _____   [ ] Represents _____

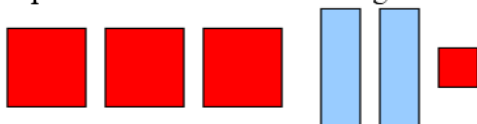[ ] Represents _____   [ ] Represents _____

[ ] Represents _____   [ ] Represents _____

Use the **glossary** to define the term **expression** _a mathematical phrase_
made up of numbers and variables connected by operations

1) What expression would the following collection represent?

Use the **Glossary** to find the following:

Term	Definition	Examples
Polynomial	_a mathematical expression with one or more algebraic terms_	
Term	_when an algebraic expression is written as a sum of several quantities, each quantity is a term of the expression_	
Coefficient	_the numerical factor(multiplier of a term)_	
Variable term	_a term that contains a variable(a letter used to represent a quantity)_	
Constant term	_a number_	

2) Rearrange the following polynomial into order of descending power.

a) $7x^2 + 8 - x + 3x^3$ b) $-2x^2 + x^4 - 3 - x$

There are three special types of polynomials.

Type of Polynomial	Number of terms	Examples
_____nomial		
_____nomial		
_____nomial		

3) Find the number of terms in each polynomial and identify the type.

a) $5k - 3$ b) $7m^3$ c) $10x^2 - 6x + 1$ d) $-7a^3 - 7a^2 + a + 1$

Term	Definition	Examples
Like Terms	terms that have the same variables with the same exponents	
Unlike Terms	terms that have different variables or the same variable with the different exponents	

4) Which pairs of terms represent like terms? Explain.

a) $2x, -5x$ b) $3, 4x$ c) $10, 2$

d) $2x^2, -3x^2$ e) $8x, -x$ f) $2x^3, 4x^2$

5) Simplify by collecting Like Terms

a) $3x + 2x + 2 - 3$ b) $2x^2 - x + 2 - 3x^2 + x + 3$

c) $4x + 8 - 2x + 4$ d) $2x^2 + 5x$

Pg 255 #1, 6, 7, 8, 9, 10