

term

1 Monomial  $6x^3yz^5$

2 Binomial  $x-9$   $7x^2-5x$   
 $a+7b$

3 Trinomial  $9x^2-5x+2$

Many Polynomial  $-8x^4+5x^3+6x^2-8x$

Leading Coefficient → 5  $x^3 + x^2 - 7x + 9$   
Degree → 3

Degree: the largest exponent

Leading coefficient: coefficient with the largest exponent/degree

Standard form:  
write exponents in descending order

<u>Degree</u>	<u>Name</u>	<u>ex</u>
0	constant	7
1	Linear	$2x-3$
2	Quadratic	$3x^2+4x-1$
3	Cubic	$4x^3+1$

1 Monomial  $6, x, 7y, -9x^3y^2$

2 Binomial  $x-9; 5x^2+3$

3 Trinomial  $9x^2-5x+2$

Many Polynomial  $-8x^4+5x-3x-4$

Non-Examples

$$8^x$$

$$\frac{4}{x}$$

$$x^{-3}$$

Non-Ex.

$$8^x$$

$$\frac{4}{x}$$

$$x^{-3}$$

$$7xy^2$$

Degree

3

L.C.

7

Constant  
none

$$5x^2 + 4x$$

Degree

2

LC

5

constant  
none

$$-8x^3 + 2x^2 - 8x - 5$$

Degree

3

Leading

-8

Constant: -5

$$6x - x^3 + 4$$

$$-x^3 + 6x + 4$$

Degree

3

L.C

-1

Constant: 4

$$1. (-2x-9) + (x+4)$$

$$\textcircled{-2x} - 9 \textcircled{+x} + 4$$

$$-x - 5$$

$$2. (-5x+17) + (-9x+4)$$

$$\boxed{-5x} + 17 + \boxed{-9x} + 4$$

$$-14x + 21$$

$$3. (3x^2 - 2x + 1) + (6x^2 + 3x)$$

$$\textcircled{3x^2} - 2x + 1 \textcircled{+6x^2} + 3x$$

$$9x^2 + x + 1$$

$$4. 6x^3 \boxed{-12x} + 1 + 8x^2 \boxed{+10x} - 6$$

$$6x^3 + 8x^2 - 2x - 5$$

$$5. 5(4x^3 - 2x^2 + 1) + 3(7x^2 - 5x - 4)$$

$$20x^3 \textcircled{-10x^2} + 5 \textcircled{+21x^2} - 15x - 12$$

$$20x^3 + 11x^2 - 15x - 7$$

$$6. 5x^2 + 15x + 15$$

$$7. -6x^2 + 8x - 8$$

$$\textcircled{2x^3} - 6x \textcircled{+2x^3} - 6x \textcircled{-5x^2} + 10x - 4 \textcircled{-5x^3} + 10x$$

$$-6x^2 + 8x - 8$$

$$(7x + 10) - (3x - 8)$$

$$7x + 10 - 3x + 8$$

$$4x + 18$$

2.  $-12x - 2$

3.  $3x^2 + 5x + 17$

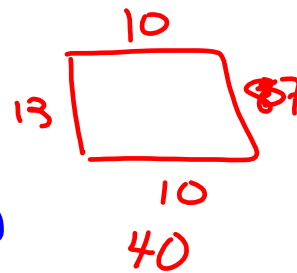
4.  $-3x^3 + x^2 - 11x - 14$

5.

$$-14x^4 - (21x^3) - 7x + 7 + (15x^3) + 20x^2 - 40x + 130$$

$$-14x^4 - 6x^3 - 20x^2 - 47x + 137$$

6.  $23x + 6$   
*Perimeter*  $(29x + 5) - (23x + 6)$  *3 sides*



$$29x + 5 - 23x - 6$$

$$6x - 1$$

$$5x + 3 + 8x - 1 + 10x + 7$$

$$23x + 6$$

$$(29x + 5) - (23x + 6)$$

