1.5 Polynomials

$3y^2 + 4y + 2$

Monomial	x , $3a$, $2b$
Binomial	$2x+4$, $x-5$
Trinomial	x^2+x+3
Polynomial	a^5-2a^4+3a-6

Degree		Ex
Constant	0	$5x^0$
Linear	1	x , $x+4$
Quadratic	2	x^2+5x+6
Cubic	3	x^3+8
Quartic	4	x^4+3x^3-2x+7
Quintic	5	x^5+3x^2-1

$4x$ coefficient

$3x^2+5x-1$ Leading Coefficient

$5x^2+1-2x+7x^3$

$7x^3+5x^2-2x+1$

$x=3$ Evaluate

$4x-5$

$4(3)-5$

$12-5$

7

Like Terms

Same variable raised to the same exponent

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

$5x^2 - 3x - 4$

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

$-3x^2 - x + 6$

$x^2 - 3x + 1 \quad -4x^2 + 2x + 5$

$3(2x^2 - 4x - 1)$

$6x^2 - 12x - 3$

$(x+4)(x-1)$ FOIL

$x^2 - x + 4x - 4$

$x^2 + 3x - 4$

$(x+3)^2$

$(x+3)(x+3)$

$x^2 + 3x + 3x + 9$

$x^2 + 6x + 9$

$$(x+2)^3$$

$$[(x+2)(x+2)](x+2)$$

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

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

$$x^3+4x^2+4x+2x^2+8x+8$$

$$x^3+6x^2+12x+8$$

51.

$1200(1.06)^4$

2013 $1200
2014 $1408
2015 $800
2016 $2300
2017 $2900

$1200(1.06)^4 + 1400(1.06)^3 + 800(1.06)^2 + 2300(1.06) + 2900$

$A = P\left(1 + \frac{r}{n}\right)^{nt}$

$\frac{3x+4}{x}$

2^x

$\sqrt{3x}$

$\frac{3x}{x} + \frac{4}{x}$

$3 + \frac{4}{x}$

$-x + 4$

$4 - x$