

## Evaluating Polynomials

Polynomials will have a “value” dependent upon the number that is substituted into the variable.

Example:

Evaluate  $4x + 3$  if  $x = 1$

$$4(1) + 3$$

$$7 + 3$$

$$10$$

Evaluate  $4x + 3$  if  $x = -2$

$$4(-2) + 3$$

$$-8 + 3 = -5$$

Evaluate  $y^3 + 3y - 5$  if  $y = -3$

$$(-3)^3 + 3(-3) - 5$$

$$-27 - 9 - 5$$

$$-40$$

Evaluate  $y^3 + 3y - 5$  if  $y = 0$

$$(0)^3 + 3(0) - 5$$

$$0 + 0 - 5$$

$$-5$$

Evaluate  $3u^2 + 2uv - 12$  if  $u = -1$  and  $v = 5$

$$3(-1)^2 + 2(-1)(5) - 12$$

$$3(1) - 10 - 12$$

$$-19$$