

Name: Key

Date: \_\_\_\_\_ Block: \_\_\_\_\_

Practice Assignment

1. Simplify and put each polynomial into standard form (if necessary). Then classify the polynomials by degree and number of terms.

Standard Form

Classification

a.  $4x^2 - 5x$

$4x^2 - 5x$

Quadratic Binomial

b.  $x + 2$

$x + 2$

linear Binomial

c.  $12$

$12$

Constant monomial

d.  $5x^2 - 5x + 1$

$5x^2 - 5x + 1$

Quadratic Trinomial

e.  $2x + 3x^2 - 4x$

$3x^2 - 2x$

Quadratic Binomial

f.  $4x^3 + 1 - 2x$

$4x^3 - 2x + 1$

Cubic Trinomial

g.  $x^2 - 2x + 9 - x^2$

$-2x + 9$

linear Binomial

h.  $4x^3 - 2x + 2x^2 - 2x + 5$

$4x^3 + 2x^2 - 4x + 5$

Cubic Polynomial

2. Create a polynomial that meets the following requirements:

a. <sup>Quadratic</sup> ~~Linear~~ Binomial with coefficients of -2 and 3:

$-2x^2 + 3x - 4$

b. Quadratic Monomial with a negative coefficient:

$-3x^2$

c. Polynomial of degree 3 with three terms:

$x^3 + 4x - 5$

d. Polynomial with a constant of 7 and two terms:

$5x + 7$

e. Cubic binomial with leading coefficient of 4:

$4x^3 - 5$

Answers will vary