

## 9.1 to 9.3 Kuta Review #2 for Quiz

Date \_\_\_\_\_ Period \_\_\_\_\_

Name each polynomial by degree and number of terms.

1)  $-6a^3 + 7a^2 + 6a$

D: CUBIC

T: TRINOMIAL

2)  $-10m^2 + 5$

D: QUADRATIC

T: BINOMIAL

3)  $-1 \cdot x^0$   $\boxed{x^0=1}$

D: CONSTANT

T: MONOMIAL

4)  $3x^1 - 5$

D: LINEAR

T: BINOMIAL

Simplify each sum.

5)  $(-8x - 2x^4 + 4x^3 - 7x^2) + (-8x^2 + 1x^4 - 4x^3 + 3x)$

$$\boxed{-x^4 - 15x^2 - 5x}$$

Combine Like terms  
by adding the  
COEF'S

Simplify each difference.

6)  $(4 - 6r - r^2) - (-7r^2 + 7r + 4)$  ← Change to an addition problem

$$\boxed{4 - 6r - r^2 + 7r^2 - 7r - 4 = 6r^2 - 13r}$$

Find each product on binomials.

7)  $(3v - 8)(6v - 3)$

$$18v^2 - 9v - 48v + 24$$

$$\boxed{18v^2 - 57v + 24}$$

8)  $(4x - 10)^2$  → expand  $(4x - 10)(4x - 10)$

$$16x^2 - 40x - 40x + 100$$

$$\boxed{16x^2 - 80x + 100}$$

9)  $(2n - 7)(2n + 7)$

$$4n^2 + 14n - 14n - 49$$

$$\boxed{4n^2 - 49}$$

Find the product.

10)  $(6x - 2)(2x^2 - 3x - 3)$

$$12x^3 - 18x^2 - 18x - 4x^2 + 6x + 6 =$$

$$\boxed{12x^3 - 22x^2 - 12x + 6}$$