

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) $-1 \cdot x^0$ $[x^0 = 1]$

D: CONSTANT

T: MONOMIAL

4) $3x - 5$

D: LINEAR

T: BINOMIAL

Simplify each sum.

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

$$-x^4 - 15x^2 - 5x$$

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

$$4 - 6r - r^2 + 7r^2 - 7r - 4 = 6r^2 - 13r$$

Find each product on binomials.

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

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

$$18v^2 - 57v + 24$$

8) $(4x - 10)^2 \xrightarrow{\text{expand}} (4x - 10)(4x - 10)$

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

$$16x^2 - 80x + 100$$

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

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

$$4n^2 - 49$$

Find the product.

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

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

$$12x^3 - 22x^2 - 12x + 6$$