Algebra 2
Name_____ ID: 1

## Unit 2 Quiz #1 Review

Date_____ Period____

**Name each polynomial by degree and number of terms. (You should have 2 names for each.)**

1) $-10$

2) $4r^2 - r + 3$

3) $-8p^4 - 5 + 2p$

4) $-9 - 4a$

5) $6n^3 + 10n$

6) $x^2$

**Simplify each expression.**

7) $\left(6k^2 + 8k\right) + \left(-2 + 7k - 8k^2\right)$

8) $\left(-8n^4 - 2\right) - \left(8n^4 + 3n^2 - 2\right)$

9) $\left(3k^3 + 2k - 3k^2\right) + \left(-2k - k^3 - 3k^4\right)$

10) $\left(-5r^2 - 4r^4 - 7r\right) - \left(-7r^2 + 8r\right)$

**Find each product.**

11) $-3k^3\left(5k^2 + k + 8\right)$

12) $(8v + 5)(-3v + 3)$

13) $(-6x + 3)\left(-2x^2 + 5x + 3\right)$

14) $(3 - 7n)^2$

**Simplify using Pascal's Triangle.**

15) $(p - 4)^5$

16) $(x + 6)^3$

17) $(3n + 5)^4$

Name_____ ID: 1
# Unit 2 Quiz #1 Review
Date_____ Period____

**Name each polynomial by degree and number of terms. (You should have 2 names for each.)**

1) $-10$

    constant monomial

2) $4r^2 - r + 3$

    quadratic trinomial

3) $-8p^4 - 5 + 2p$

    quartic trinomial

4) $-9 - 4a$

    linear binomial

5) $6n^3 + 10n$

    cubic binomial

6) $x^2$

    quadratic monomial

**Simplify each expression.**

7) $\left(6k^2 + 8k\right) + \left(-2 + 7k - 8k^2\right)$

    $-2k^2 + 15k - 2$

8) $\left(-8n^4 - 2\right) - \left(8n^4 + 3n^2 - 2\right)$

    $-16n^4 - 3n^2$

9) $\left(3k^3 + 2k - 3k^2\right) + \left(-2k - k^3 - 3k^4\right)$

    $-3k^4 + 2k^3 - 3k^2$

10) $\left(-5r^2 - 4r^4 - 7r\right) - \left(-7r^2 + 8r\right)$

    $-4r^4 + 2r^2 - 15r$

**Find each product.**

11) $-3k^3\left(5k^2 + k + 8\right)$

    $-15k^5 - 3k^4 - 24k^3$

12) $\left(8v + 5\right)\left(-3v + 3\right)$

    $-24v^2 + 9v + 15$

13) $\left(-6x + 3\right)\left(-2x^2 + 5x + 3\right)$

    $12x^3 - 36x^2 - 3x + 9$

14) $\left(3 - 7n\right)^2$

    $9 - 42n + 49n^2$

**Simplify using Pascal's Triangle.**

15) $\left(p - 4\right)^5$

    $9p^2 - 48p + 64$

16) $\left(x + 6\right)^3$

    $x^2 + 12x + 36$

17) $\left(3n + 5\right)^4$

    $9n^2 + 24n + 16$