

NAME: \_\_\_\_\_

REVIEW 6

DATE: \_\_\_\_\_

ALGEBRA

**For the following identify the type of polynomial.**

1.  $y^2 - 3y - 7$

2.  $3d^2$

3.  $5d + 9$

**For the following:**

**a. Write each polynomial in standard form.**

**b. Identify the degree of the polynomial.**

4.  $3x^2 - 2x + 5x - 6x^3$

5.  $3b^4 + 3a^2b^2 + ab^3 + a^3b - a^4$

**Simplify.**

6.  $(-x)^2(x^2y)(-y)^3$

7.  $(-2d^2 + d + 3) - 5(d^2 + 2d - 1)$

8.  $(gm)(-3g)(4m^2)$

9.  $(6ab^3)^2$

10.  $\frac{(w^4)^6}{w^2}$

11.  $4x(x - 1)$

12.  $(3x^{-4})^2$

13.  $(3x + 7)^2$

14.  $(2x - 1)(x - 4)$

15.  $\frac{7a^3b^2c^5}{-28a^2b^2c^2}$

16.  $\frac{5^3(5^2)}{5^4}$

17.  $(9b + 4) - (b - 8)$

18.  $5(2k^2 - 3k) - 7k^2$

19.  $(2x + 1)(2x - 1)$

20.  $\frac{33x^3y^2 - 11x^2y^3 + 11xy}{11xy}$

21.  $a - (a - 5)(a + 2)$

22.  $3x - 7(3x - 7)$

23.  $(2n + 3)(n^2 - 4n - 1)$

24.  $(-2a^2b^2)^3 + (4a^3b^3)^2$