

Name: \_\_\_\_\_

## Polynomials

**Name each polynomial by number of terms and by degree.**

1)  $3s^2 + 1$

2)  $y + y^3$

3)  $x^2 + x^4 + x - 1$

4)  $8x^2 - 2x + 3$

5)  $8x^3$

6)  $4r + 1 + 5r$

**Arrange the terms of each polynomial so that the powers of x are in ascending order.**

7)  $3 + x^4 + 2x^2$

8)  $1 + x^3 + x^5 + x^2$

9)  $2x^2 + 5ax + a^3$

10)  $-2x^2y + 3xy^3 + x^3$

11)  $17bx^2 + 11b^2x - x^3$

12)  $21p^2x + 3px^3 + p^4$

**Arrange the terms of each polynomial so that the powers of x are in descending order.**

13)  $-7 + x^2 + 4x$

14)  $-6x + x^5 + 4x^3 - 20$

15)  $5x^2 - 3x^3 + 2x + 5$

16)  $a^2x + x^3 - 3$

17)  $11x^2 + 7ax^3 - 3x + 2a$

18)  $4x^3y + 3xy^4 - x^2y^3 + y^4$