

## Chapter 7 Practice Test - Polynomials

Name each polynomial by degree and number of terms.

1)  $x^5$

2)  $-7n + 9n^2 - 3$

Use the polynomial  $P(x) = 3x^3 + 7x^2 - 2x - 4$  to answer questions 3-8.

3) How many terms are in the polynomial?

4) What is the degree of the polynomial?

5) What is the leading coefficient of the polynomial?

6) What are the coefficients of the polynomial?

7) What is the constant term of the polynomial?

8) What is the quadratic term of the polynomial?

Simplify and write in standard form.

9)  $(5b - 3b^3 - 7) + (b - 7b^3 - 2)$

10)  $(2a^2 - a - 6a^3) + (8a + 8a^2 - 7)$

11)  $(6x^3 + 5 - 6x^4) - (5x^3 + 5 + 6x^4)$

12)  $(8 + 5m + 2m^2) - (m^2 + 1 + 4m)$

Find each product.

13)  $6(6n + 5)$

14)  $3n(n - 8)$

15)  $(n - 2)(n - 5)$

16)  $(3r + 8)(-7r + 5)$

17)  $(x + 3)(x - 3)$

18)  $(4n - 5)(4n + 5)$

19)  $(k + 6)^2$

20)  $(7x - 3)^2$