Lesson 10

Introduction to Polynomials

Answers

1) 3x^2 + 2x + 5

2) 5y^2 + 2y - 3y^2 + y - 6 = 2y^2 + 3y - 6

3) 3x^3 + 12x^2 - 6x

4) Degree 3 (from the 7a^3 term)

5) 6m^2 + 4m - 4

6) 6x^2 + 10x - x^2 + x = 5x^2 + 11x

7) Area = (x + 3)(2x - 1) = 2x^2 - x + 6x - 3 = 2x^2 + 5x - 3

8) 4x^3 + x^2 - 2x + 1

9) 4a^2 - 8a + 9

10) Degree 5 (from the 4x^5 term)

11) 4 terms; it is a polynomial (4-term polynomial)

12) -8y^3 + 12y^2 - 4y

13) 2a^5 - 10a^3 + 6a^2

14) 3x^2 - x + 4 - x^2 + 3x + 2 = 2x^2 + 2x + 6

15) 3x^2 + 6x - 3 + 2x^2 - 2x + 8 = 5x^2 + 4x + 5

16) 2(16) - 3(4) + 1 = 32 - 12 + 1 = 21

17) Area = (x + 2)^2 = x^2 + 4x + 4

18) 4y^3 - 2y^2 + 3y + 5

19) No; polynomials cannot have negative exponents.

20) t = 1: h = -16 + 48 + 5 = 37 ft; t = 2: h = -64 + 96 + 5 = 37 ft