

**Answers to Even-Numbered Review Exercises from Chapters 5 and 6 | Test 3****Chapter 5** Review Exercises (pp. 335 - 337)

42. 5<sup>th</sup> degree

48.  $(9xy + 4x^2 + 18) + (7xy - 4x^3 - 9x)$   
 $= -4x^3 + 4x^2 + 16xy - 9x + 18$

50.  $(3x^2y - 7xy - 4) + (9x^2y + x) - (x - 7)$   
 $= 12x^2y - 7xy + 3$

54.  $P(0) = 8$

62.  $-12a^2b^5 - 28a^2b^3 - 4ab^2$

66.  $2x^3 + 3x^2 - 12x + 5$

68.  $x^2 + \frac{1}{3}x - \frac{2}{9}$

72.  $16x^2 + 72x + 81$

74.  $16 - 9a^2 + 6ab - b^2$

82.  $7ab(2ab - 3b + 1)$

88.  $(x^2 - 2)(x - 1)$

92.  $(x - 4)(x + 20)$

94.  $3(x + 2)(x + 9)$

128.  $x = -3, -\frac{1}{5}, 4$

130.  $x = -3, 0, 3$

138.  $x = -\frac{3}{2}, 0, \frac{1}{4}$

148.  $P(-2) = -10$

150.  $(x^2 - 3)(y + 4)$

152.  $(4x + 3)^2(y - 20)(y + 1)$

156.  $x = -2, 13$

**Chapter 6** Review Exercises (pp. 409 - 411)

16.  $\frac{1}{6}$

18.  $\frac{(x + 4)(x + 5)}{3}$

22.  $-\frac{x + 3}{2(x + 2)}$

32.  $\frac{2x^2 - 5x - 4}{x - 3}$

34.  $\frac{3x^2 - 7x - 4}{(3x - 4)(9x^2 + 12x + 16)}$

90.  $\frac{6}{a}$

94.  $\frac{2(7x - 20)}{(x + 4)^2(x - 4)}$