

Answers to Review #2: 44-69.

44. $y = x^2 - x - 12$

45. $h(g(x)) = x^2 + 2x + 3$

46. $n = 58$

47. $S_{200} = 0$

48. $y = -\frac{2}{3}x - 1$

49. $y = 5$

50. $x = 6$ or $x = -2$

51. $m = 2$

52. $y > \frac{20}{3}$ or $x < -2$

53. $x^5 - 4$ (answers will vary)

54. $-4x^5 - 10x^4 + 7x^3 + 3x^2 - 2x - 10$

55. $x^3 - 2x^2 - 7x - 4$

56. $P(-15) = -580$

57. $(3y - 4)(9y^2 + 12y + 16)$

58. $3x^2 + 2x - 1$

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

60. $(x+4)(x+2)(x-2)$

61. $x = \left\{1, \frac{-3 \pm i\sqrt{131}}{10}\right\}$

62. $x = \{-4, -2, 2, 5\}$

63. $x = \left\{-1, \frac{-3 \pm \sqrt{29}}{2}\right\}$

64. $3 - 8i$

65. $\{\pm 1, \pm 2, \pm 3, \pm 4, \pm 6, \pm 12\}$

66. 39

67. $x = \{-1, \pm\sqrt{5}\}$

68. $x+3$ is not a factor

69. $2x^5 - 3x^4 - x^2 + x - 17$