AUC PreCalculus

Assignment 17.

The deadline for all homework assignments is the one specified in Archie before 11:59 pm. As discussed in class, It must be correctly uploaded in order to be graded. Show all your work and justifications.

For Exercises 57–72, solve by using the quadratic formula.

57. $x^2 - 3x - 7 = 0$ $\left\{\frac{3 \pm \sqrt{37}}{2}\right\}$

58. $x^2 - 5x - 9 = 0$ $\left\{\frac{5 \pm \sqrt{61}}{2}\right\}$

59. $y^2 = -4y - 6$ $\{-2 \pm i\sqrt{2}\}$

60. $z^2 = -8z - 19$ $\{-4 \pm i\sqrt{3}\}$

61. $t(t - 6) = -10$ $\{3 \pm i\}$

62. $m(m + 10) = -34$ $\{-5 \pm 3i\}$

63. $-7c + 3 = -5c^2$ $\left\{\frac{7 \pm i\sqrt{11}}{10}\right\}$

64. $-5d + 2 = -6d^2$ $\left\{\frac{5 \pm i\sqrt{23}}{12}\right\}$

65. $(6x + 5)(x - 3) = -2x(7x + 5) + x - 12$ $\left\{\frac{1}{2}, -\frac{3}{10}\right\}$

66. $(5c + 7)(2c - 3) = -2c(c + 15) - 35$

67. $9x^2 + 49 = 0$ $\left\{\pm\frac{7}{3}i\right\}$

68. $121x^2 + 4 = 0$ $\left\{\pm\frac{2}{11}i\right\}$

69. $\frac{1}{2}x^2 - \frac{2}{7} = \frac{5}{14}x$ $\left\{\frac{5 \pm \sqrt{137}}{14}\right\}$

70. $\frac{1}{3}x^2 - \frac{7}{6} = \frac{3}{2}x$ $\left\{\frac{9 \pm \sqrt{137}}{4}\right\}$