

**Summer Assignment Review- Solving Quadratic Equations using the Quadratic Formula**

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**Solve each equation with the quadratic formula. Leave your answer as an integer, reduced rational number, or simplified radical.**

1)  $-2p^2 + 12p = 10$

2)  $-3a^2 - 12a = -63$

3)  $11x^2 + 2x = 20$

4)  $8a^2 = -10a + 5$

5)  $4x^2 - 16 = 11x$

6)  $4n^2 - 3n = 45$

7)  $-4x^2 + 3 = -11x$

8)  $k^2 - 9 = 0$

9)  $-m^2 + 9 = 2m$

10)  $6n^2 + 7n = 115$

11)  $4x^2 + 6x = 130$

12)  $2n^2 = 9 + 9n$

13)  $-6p^2 + 5 = p$

14)  $3b^2 - 18 = -11b$

15)  $6v^2 = 20 + 7v$

16)  $-3n^2 = 6 + 10n$

17)  $-7r^2 = -10r - 1$

18)  $6k^2 + 12k = 9$

19)  $-11m^2 = -5$

20)  $-4x^2 = 7x - 9$

Answers to Summer Assignment Review- Solving Quadratic Equations using the Quadratic Formula

1)  $\{1, 5\}$

2)  $\{-7, 3\}$

3)  $\left\{\frac{-1 + \sqrt{221}}{11}, \frac{-1 - \sqrt{221}}{11}\right\}$

4)  $\left\{\frac{-5 + \sqrt{65}}{8}, \frac{-5 - \sqrt{65}}{8}\right\}$

5)  $\left\{\frac{11 + \sqrt{377}}{8}, \frac{11 - \sqrt{377}}{8}\right\}$

6)  $\left\{3\frac{3}{4}, -3\right\}$

7)  $\left\{-\frac{1}{4}, 3\right\}$

8)  $\{3, -3\}$

9)  $\{-1 - \sqrt{10}, -1 + \sqrt{10}\}$

10)  $\left\{3\frac{5}{6}, -5\right\}$

11)  $\left\{5, -6\frac{1}{2}\right\}$

12)  $\left\{\frac{9 + 3\sqrt{17}}{4}, \frac{9 - 3\sqrt{17}}{4}\right\}$

13)  $\left\{-1, \frac{5}{6}\right\}$

14)  $\left\{\frac{-11 + \sqrt{337}}{6}, \frac{-11 - \sqrt{337}}{6}\right\}$

15)  $\left\{2\frac{1}{2}, -1\frac{1}{3}\right\}$

16)  $\left\{\frac{-5 - \sqrt{7}}{3}, \frac{-5 + \sqrt{7}}{3}\right\}$

17)  $\left\{\frac{5 - 4\sqrt{2}}{7}, \frac{5 + 4\sqrt{2}}{7}\right\}$

18)  $\left\{\frac{-2 + \sqrt{10}}{2}, \frac{-2 - \sqrt{10}}{2}\right\}$

19)  $\left\{-\frac{\sqrt{55}}{11}, \frac{\sqrt{55}}{11}\right\}$

20)  $\left\{\frac{-7 - \sqrt{193}}{8}, \frac{-7 + \sqrt{193}}{8}\right\}$