Algebra 2 Name_____ ID: 1

Assignment

Date_____ Period____

Solve each equation.

1) $17v^2 + 1 = -680$

2) $10k^2 + 10 = -194$

3) $10r^2 + 15 = 655$

4) $6b^2 - 19 = 1715$

5) $41x^2 + 119x - 84 = 6x^2$

6) $7a^2 + 29a + 2 = -2$

7) $p^2 - 6 = 5p$

8) $n^2 + 5n = 14$

9) $(x - 1)(x - 5) = 0$

10) $(4v + 5)(v + 3) = 0$

11) $-5p = -2 - 8p^2 + 2p$

12) $-10x^2 + 5x + 2 = 5$

13) $5n^2 - 9 = -8$

14) $-9b^2 + 5b + 12 = 5$

15) $2b^2 - 6b + 6 = 10$

16) $3x^2 - 18 = -9$

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Solve each equation.

1) $17v^2 + 1 = -680$ $\left\{\frac{i\sqrt{11577}}{17}, -\frac{i\sqrt{11577}}{17}\right\}$

2) $10k^2 + 10 = -194$ $\left\{\frac{i\sqrt{510}}{5}, -\frac{i\sqrt{510}}{5}\right\}$

3) $10r^2 + 15 = 655$

$\{8, -8\}$

4) $6b^2 - 19 = 1715$

$\{17, -17\}$

5) $41x^2 + 119x - 84 = 6x^2$

$\left\{\frac{3}{5}, -4\right\}$

6) $7a^2 + 29a + 2 = -2$

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

7) $p^2 - 6 = 5p$

$\{-1, 6\}$

8) $n^2 + 5n = 14$

$\{-7, 2\}$

9) $(x - 1)(x - 5) = 0$

$\{1, 5\}$

10) $(4v + 5)(v + 3) = 0$

$\left\{-\frac{5}{4}, -3\right\}$

11) $-5p = -2 - 8p^2 + 2p$

$\left\{\frac{7 + i\sqrt{15}}{16}, \frac{7 - i\sqrt{15}}{16}\right\}$

12) $-10x^2 + 5x + 2 = 5$

$\left\{\frac{5 - i\sqrt{95}}{20}, \frac{5 + i\sqrt{95}}{20}\right\}$

13) $5n^2 - 9 = -8$

$\left\{\frac{\sqrt{5}}{5}, -\frac{\sqrt{5}}{5}\right\}$

14) $-9b^2 + 5b + 12 = 5$

$\left\{\frac{5 - \sqrt{277}}{18}, \frac{5 + \sqrt{277}}{18}\right\}$

15) $2b^2 - 6b + 6 = 10$

$\left\{\frac{3 + \sqrt{17}}{2}, \frac{3 - \sqrt{17}}{2}\right\}$

16) $3x^2 - 18 = -9$

$\{\sqrt{3}, -\sqrt{3}\}$