Kuta Software - Infinite Algebra 2 Name_____

Quadratic Equations w/ Square Roots

Date_____ Period____

Solve each equation by taking square roots.

1) $k^2 + 6 = 6$

2) $25v^2 = 1$

3) $n^2 + 4 = 40$

4) $x^2 - 2 = 17$

5) $9r^2 - 3 = -152$

6) $9r^2 - 5 = 607$

7) $-10 - 5n^2 = -330$

8) $5a^2 + 7 = -60$

9) $4b^2 + 2 = 326$

10) $-8 - 8p^2 = -31$

11) $5x^2 + 9 = 14$

12) $2x^2 - 2 = 6$

13) $8r^2 - 17 = 2471$

14) $13p^2 - 3 = 4209$

15) $7p^2 + 16 = 2151$

16) $13 - 8n^2 = -1139$

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Quadratic Equations w/ Square Roots

Date_____ Period____

Solve each equation by taking square roots.

1) $k^2 + 6 = 6$

$\{0\}$

2) $25v^2 = 1$

$\left\{\frac{1}{5}, -\frac{1}{5}\right\}$

3) $n^2 + 4 = 40$

$\{6, -6\}$

4) $x^2 - 2 = 17$

$\{\sqrt{19}, -\sqrt{19}\}$

5) $9r^2 - 3 = -152$

$\left\{\frac{i\sqrt{149}}{3}, -\frac{i\sqrt{149}}{3}\right\}$

6) $9r^2 - 5 = 607$

$\{2\sqrt{17}, -2\sqrt{17}\}$

7) $-10 - 5n^2 = -330$

$\{8, -8\}$

8) $5a^2 + 7 = -60$

$\left\{\frac{i\sqrt{335}}{5}, -\frac{i\sqrt{335}}{5}\right\}$

9) $4b^2 + 2 = 326$

$\{9, -9\}$

10) $-8 - 8p^2 = -31$

$\left\{\frac{\sqrt{46}}{4}, -\frac{\sqrt{46}}{4}\right\}$

11) $5x^2 + 9 = 14$

$\{1, -1\}$

12) $2x^2 - 2 = 6$

$\{2, -2\}$

13) $8r^2 - 17 = 2471$

$\{\sqrt{311}, -\sqrt{311}\}$

14) $13p^2 - 3 = 4209$

$\{18, -18\}$

15) $7p^2 + 16 = 2151$

$\{\sqrt{305}, -\sqrt{305}\}$

16) $13 - 8n^2 = -1139$

$\{12, -12\}$