Algebra 2

Name_____ ID: 1

Assignment

Date_____ Period____

Solve each equation by taking square roots.

1) $9b^2 + 7 = 88$

2) $3n^2 + 1 = 241$

3) $10m^2 + 2 = 992$

4) $81n^2 + 6 = 10$

Solve each equation by completing the square.

5) $x^2 - 4x - 71 = 0$

6) $r^2 - 20r - 12 = 0$

7) $3a^2 + 6a - 74 = -2$

8) $9x^2 - 18x + 8 = 3$

9) $4n^2 + 4n - 5 = 0$

10) $3x^2 - 5x - 1 = 0$

Rewrite the given equation in vertex form by completing the square.

11) $y = x^2 - 8x + 14$

12) $y = -x^2 + 8x - 17$

13) $y = -x^2 + 4x - 1$

14) $y = -2x^2 + 12x - 19$