

13.REV.2 ~ End of Unit Review

Past due on _____ Period _____

Determine the roots of each quadratic equation via factoring and the Zero Product Property.

1) $9x^2 + 3x = 2$

2) $5v^2 + 8 = -14v$

Solve each equation by taking square roots. Rewrite the roots in simplified radical form.

3) $4x^2 - 5 = 315$

4) $30 - 5x^2 = -90$

Determine the roots of each quadratic equation by completing the square. Round your answer to the nearest hundredth.

5) $a^2 + 12a - 10 = -3$

6) $k^2 - 10k - 66 = 6$

Use the Quadratic Formula to determine the exact zeros or roots of each function or equation. Solve for EXACT solutions; rewrite the roots in simplified radical form.

7) $2n^2 + 8n - 17 = -9$

8) $2x^2 - 5x - 42 = -9$

Use the discriminant to determine the number of zeros or roots each quadratic function has.

9) $y = -3x^2 + 6x - 3$

10) $y = 5x^2 + 9x - 2$

Determine the equation of the axis of symmetry and the coordinates of the vertex WITHOUT graphing or completing the square. (Refer to page 778 in the Chapter 12 text.)

11) $y = -2x^2 - 8x - 7$

12) $y = 5x^2 + 8x + 1$