



SM 2

Name: _____ Period: _____

SM2—Solving Quadratic Equations Test Review

Solve the following equations by factoring:

1. $0 = (3x + 2)(2x + 4)$

2. $6y^2 + 30y = 0$

3. $n^2 + 28 = 11n$

4. $-3h^2 + h = -14$

5. $0 = 9w^2 - 16$

Find all solutions (real and imaginary) of each equation by using the square root principle. Write all answers in simplest radical form, and write imaginary answers in the form $a + bi$.

6. $m^2 = 64$

7. $k^2 + 13 = -7$

8. $(r + 3)^2 = 81$

$$9. (z-3)^2 = 24$$

$$10. -2(v-7)^2 - 50 = 0$$

Find all solutions (real and imaginary) of each equation by using the quadratic formula. Write all answers in simplest radical form, and write imaginary answers in the form $a + bi$.

$$11. x^2 + 10x - 11 = 0$$

$$12. 2n^2 - 2n + 7 = 0$$

$$\mathbf{a} = \underline{\hspace{2cm}}, \mathbf{b} = \underline{\hspace{2cm}}, \mathbf{c} = \underline{\hspace{2cm}}$$

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$$13. -2t^2 + 3 = 8t$$

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