

**Practice*****The Quadratic Formula and the Discriminant***

***Find the value of the discriminant and describe the nature of the roots of each quadratic equation. Then solve the equation. Express irrational roots as exact and approximate to the nearest hundredth.***

1.  $x^2 - 9x + 14 = 0$

2.  $r^2 = 3r$

3.  $9u^2 - 24u + 16 = 0$

4.  $n^2 - 3n = 40$

5.  $3t^2 + 9t - 2 = 0$

6.  $7u^2 + 6u + 2 = 0$

7.  $5w^2 - 2w + 4 = 0$

8.  $12x^2 - x - 6 = 0$

9.  $2m^2 + 7m = 0$

10.  $x^2 - \frac{1}{2}x + \frac{1}{16} = 0$

11.  $12x^2 + 2x - 4 = 0$

12.  $6w^2 - 2w - 1 = 0$