

8-9**Practice***Form K***The Quadratic Formula and the Discriminant**

Use the quadratic formula to solve each equation. Give perfect answers and round answers to the nearest hundredth.

1. $y^2 - 4y - 4 = 0$

2. $3r^2 + 5r = 1$

3. $h^2 + 12h = -16$

4. $5v^2 + 3v = 1$

5. A football is passed through the air and caught at ground level for a touchdown. The height h of the ball in feet is given by $h = -d^2 + 12d + 6$, where d is the distance in feet the ball travels horizontally. How far from the player passing the ball will the ball be caught?

Use the quadratic formula to solve each equation. If necessary, round answers to the nearest hundredth.

6. $2n^2 - 6n = 8$

7. $-3p^2 + 17p = 20$

8. $4d^2 - 8d + 3 = 0$

9. $15k^2 - 7k = 2$

10. $x^2 + 7x + 5 = 0$

11. $x^2 + 4x + 10 = 0$