

Math 10 Quiz: Circles

1. **Identifying Center and Radius** Given the equation of a circle in standard form: $(x - 3)^2 + (y + 4)^2 = 49$. Write the center and radius of this circle.
2. **Creating an Equation** Write the equation of a circle in standard form that has a center at $(2, -5)$ and a radius of $6\sqrt{2}$.
3. **Completing the Square** The equation of a circle is given in general form: $x^2 + y^2 - 6x + 8y - 3 = 0$. Complete the square to find the center and radius of this circle.
4. **From Standard to General Form** Given the equation of a circle in standard form: $(x + 1)^2 + (y - 2)^2 = 16$. Write this equation in general form.
5. **Equation with Given Area and Point** Write the equation of a circle that has an area of 50π square units and passes through the point $(7, 0)$ on the x-axis. (Multiple answers are possible. Try to find an easy one!)