

Algebra 2
Unit: Conic Sections
Section: Circles

Flash Cards: Graphing Circles

Directions: Graph the following circles.

1. Graph: $x^2 + y^2 = 25$.
2. Graph: $(x - 1)^2 + (y - 1)^2 = 4$
3. Graph: $(x - 2)^2 + (y + 1)^2 = 9$
4. Graph: $(x + 3)^2 + (y + 2)^2 = 5$

Answers:

1. This circle has its center at the point $(0, 0)$ and radius equal to 5. It goes through the points $(5, 0)$, $(0, 5)$, $(-5, 0)$ and $(0, -5)$.
2. This circle has its center at the point $(1, 1)$ and radius equal to 2. It goes through the points $(3, 1)$, $(1, 3)$, $(-1, 1)$ and $(1, -1)$.
3. This circle has its center at the point $(2, -1)$ and radius equal to 3. It goes through the points $(5, -1)$, $(2, 2)$, $(-1, -1)$ and $(2, -4)$.
4. This circle has its center at the point $(-3, -2)$ and radius equal to square root of 5. It goes through the points $(-3 + \sqrt{5}, -2)$, $(-3, -2 + \sqrt{5})$, $(-3 - \sqrt{5}, -2)$ and $(-3, -2 - \sqrt{5})$.