

Algebra 2
Unit: Conic Sections
Section: Ellipses

Flash Cards: Graphing Ellipses

Directions: Graph the following ellipses.

1. Graph: x^2 divided by 25 plus y^2 divided by 9 equals 1.
2. Graph: x^2 divided by 4 plus y^2 divided by 25 equals 1
3. Graph: $(x - 2)^2$ divided by 9 plus $(y + 1)^2$ divided by 16 equals 1
4. Graph: x^2 divided by 25 plus $(y + 3)^2$ divided by 1 equals 1

Answers:

1. This ellipse has its center at the point (0, 0). It goes through the points (5, 0), (0, 3), (negative 5, 0) and (0, negative 3).
2. This ellipse has its center at the point (0, 0). It goes through the points (2, 0), (0, 5), (negative 2, 0) and (0, negative 5).
3. This ellipse has its center at the point (2, negative 1). It goes through the points (5, negative 1), (2, 3), (negative 1, negative 1) and (2, negative 5).
4. This ellipse has its center at the point (0, negative 3). It goes through the points (5, negative 3), (0, negative 2), (negative 5, negative 3) and (0, negative 4).