

EXPLORING CONIC SECTIONS Exit Quiz

Part A Instructions: Choose the option that completes the sentence or answers the question.

1. A conic section is formed when a plane intersects a:

- a. Plane
- b. Cylinder
- c. Double Cone
- d. None of these

2. A circle with center at origin has the equation:

- a. $(x - h)^2 + (y - k)^2 = r^2$
- b. $(x - 0)^2 + (y - 1)^2 = r^2$
- c. $x^2 + y^2 = r^2$
- d. Both a and b

3. Which of the following is not a valid conic section?

- a. Vertical Hyperbola
- b. Horizontal Ellipse
- c. Vertical Parabola
- d. Horizontal Circle

4. Which of the following represents the equation of a hyperbola?

- a. $\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$
- b. $\frac{(y-k)^2}{a^2} - \frac{(x-h)^2}{b^2} = 1$
- c. $\frac{(y-k)^2}{a^2} + \frac{(x-h)^2}{b^2} = 1$
- d. Both a and b

Part B Instructions: Answer the question below.

Write an equation of a Vertical Hyperbola with center at (1,-1).
