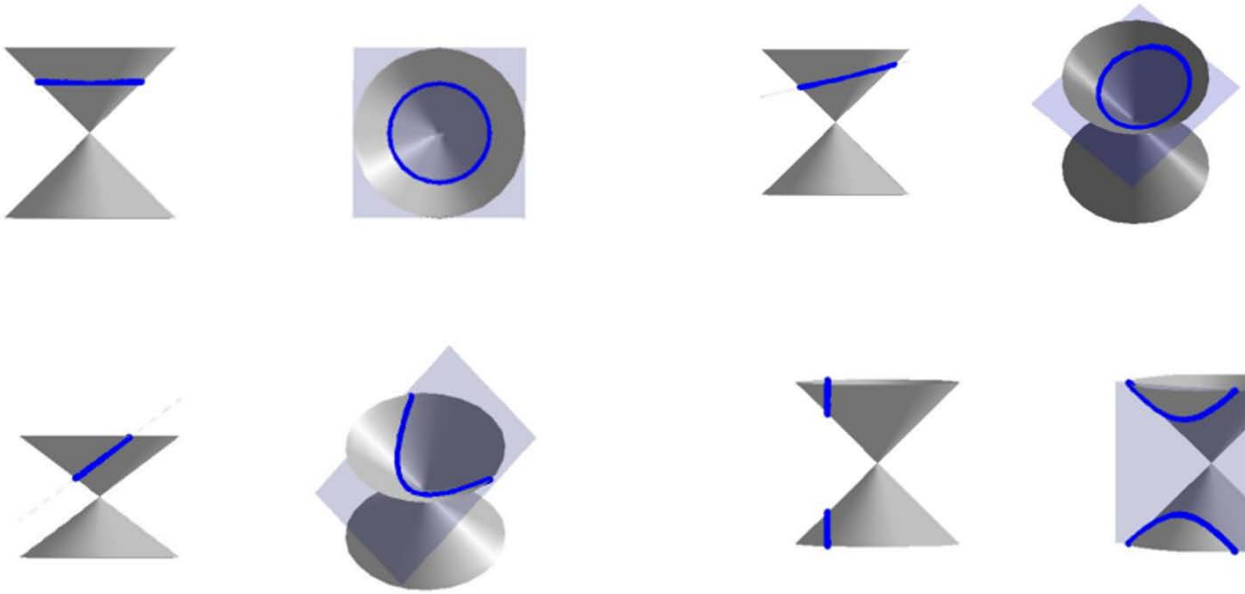
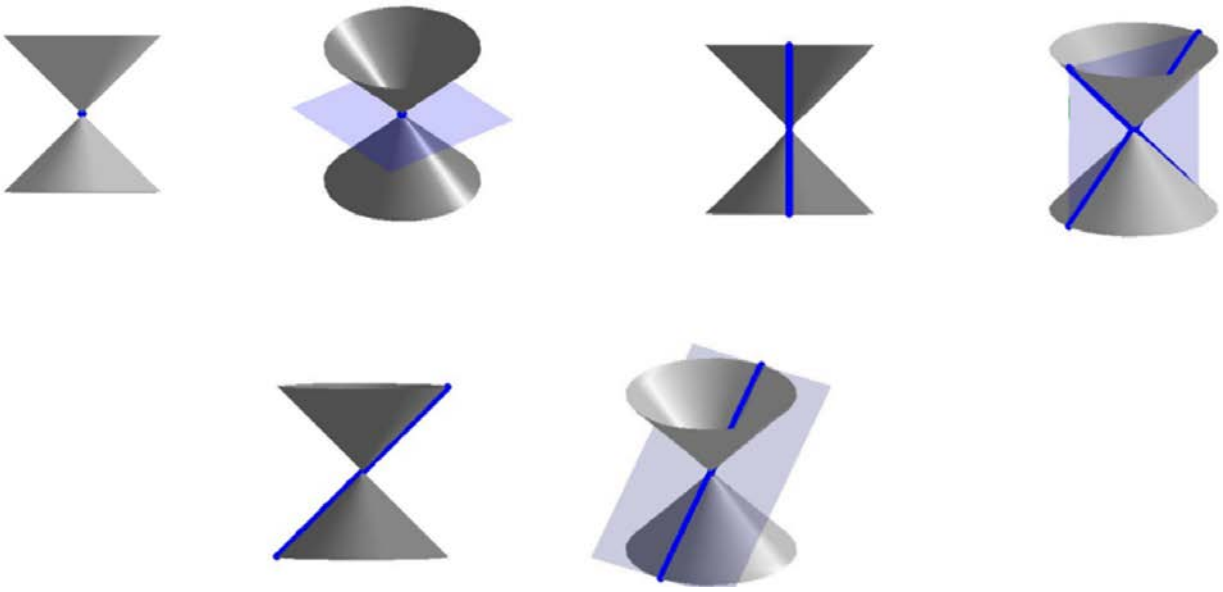
PreCalculus **Name**_____
Notes: Pre 9.1 (Circles) **Date**_____**Block**_____

A conic section is: _____

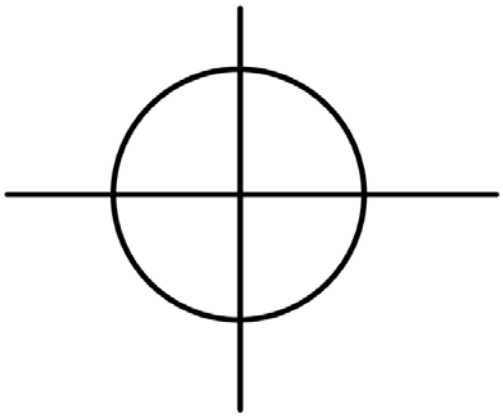
_____



If the slicing plane contains the vertex of the cone, we get the so-called _____:
a point, a line, or two intersecting lines.

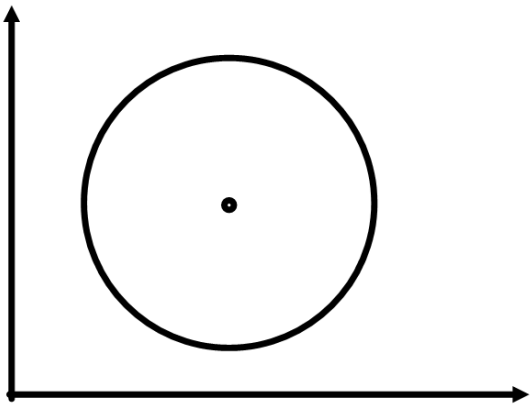


The equation of a circle with radius r and the center at the origin: _____



a.) r = 6, center: (0, 0)

With radius r and center at (h, k): _____

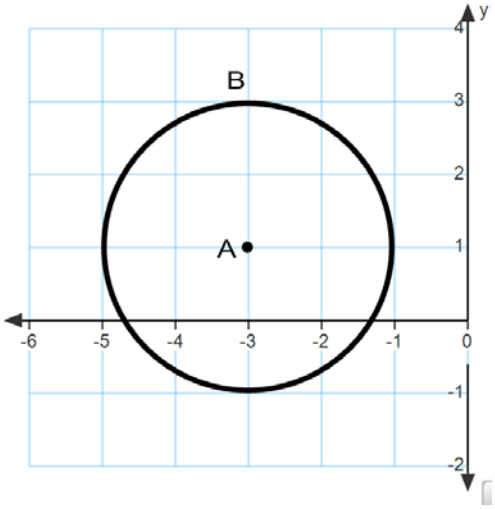


b.) r = 7, center: (0, -9)

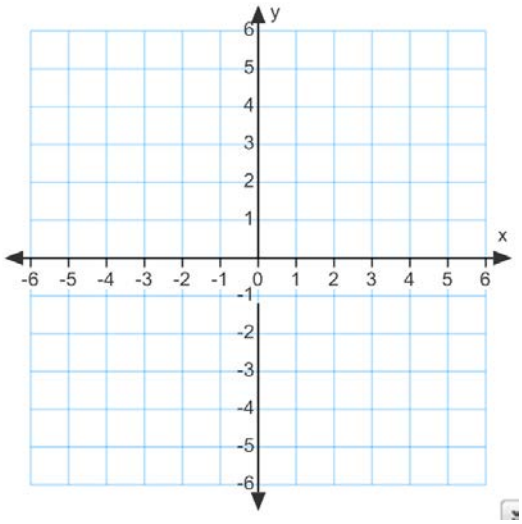
c.) r = 6, center: (-3, 4)

Write the equation of the circle:

1.)



2.) Point (-5, 6) and Center (-1, 3)



3.) Write the equation of a circle: Endpoints of diameter (-11, 13) and (4,5).

4.) Solve $x^2 + 20x + 104 = 0$ by completing the square.

Write the equation of the circle by completing the square.

5.) $x^2 + y^2 + 4x - 4y - 17 = 0$

6.) $x^2 + y^2 + 8x - 2y - 64 = 0$

7.) $x^2 + y^2 + 14x - 12y + 4 = 0$

Write the equation of the circle by completing the square.

8.) $3x^2 + 3y^2 - 12x + 30y + 75 = 0$

9.) $4x^2 + 4y^2 - 5x + 8y - 2 = 0$

10.) $2x^2 + 2y^2 + 6x - 8y + 12 = 0$