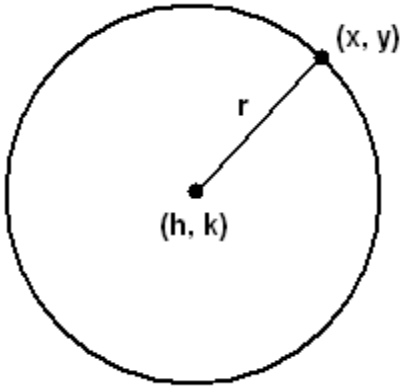
Advanced Geometry
Equations of Circles

Name: _____

► Definition of Circle:



► Deriving the equation of a Circle:

[EX 1] State the center and radius of the circle: $x^2 + y^2 = 64$.

[EX 2] State the center and radius of the circle: $(x + 2)^2 + (y - 4)^2 = 49$.

[EX 3] State the center and radius of the circle: $(x - 5)^2 + (y + 1)^2 = 16$.

[EX 4] State the center and radius of the circle: $(x + 6)^2 + (y - 2)^2 = 8$.

[EX 5] Find the equation of the circle with center (3, -7) and radius 12.

[EX 6] Find the equation of the circle with center (-12, -11) and radius $\sqrt{7}$

[EX 7] Find the equation of the circle with center (-7, 9) and radius 11.