

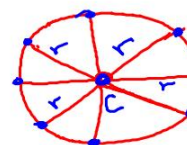


Equations of circles

Section P.2

--17.

- A circle is the set of points in a plane at a fixed distance (radius) from a fixed point (center).



- The standard form equation of a circle is: $(x - r)^2 + (y - k)^2 = \underline{r^2}$

Center (r,k) radius r

- Example: $(x - 2)^2 + (y - 3)^2 = 25$

$(2, 3)$

$r = 5$

- $(x + 2)^2 + (y + 3)^2 = 25$

$(-2, -3)$

$r = 5$

- $(x + 5)^2 + (y - 7)^2 = 16$

$(-5, 7)$

$r = 4$