$(0,0) \rightarrow (2,1)$ don't change r

$(x-2)^2+(y-1)^2=1$

distance $=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

Summary:

$(x-h)^2+(y-k)^2=r^2$

(h,k) = center (if negative, then $(x+\_)$)

r = distance from center $=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

radius $\left(\frac{\text{diameter}}{2}\right)$