G7A-2 Name_____

Rewriting circle equations to graphing form

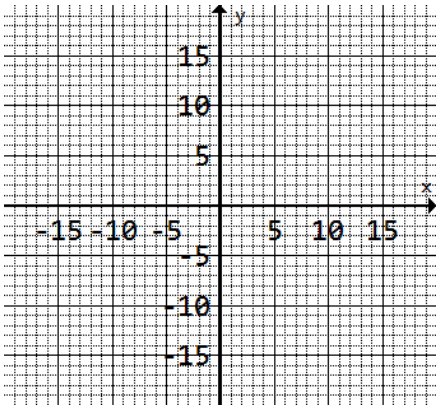
Practice: C-Level

1. Rewrite the circle equations in graphing form, and then find the center and the radius of the circle

a) $\boldsymbol{x^2 - 10x + 25 + y^2 + 4y + 4 = 100}$	**Center:** **Radius:**
b) $\boldsymbol{x^2 + 8x + 16 + y^2 - 20y + 100 = 4}$	**Center:** **Radius:**
c) $\boldsymbol{x^2 - 22x + 121 + y^2 - 2y + 1 = 25}$	**Center:** **Radius:**
d) $x^2 - 20x + 100 + y^2 - 10y + 25 = 121$	**Center:** **Radius:**

2. Graph each circle.

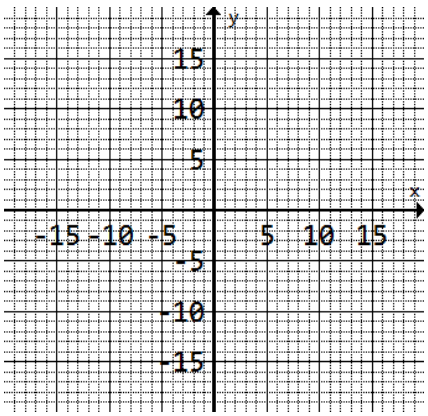
a) $x^2 + 8x + 16 + y^2 + 20y + 100 = 25$



Center:

Radius

b) $x^2 - 20x + 100 + y^2 - 10y + 25 = 81$



Center:

Radius

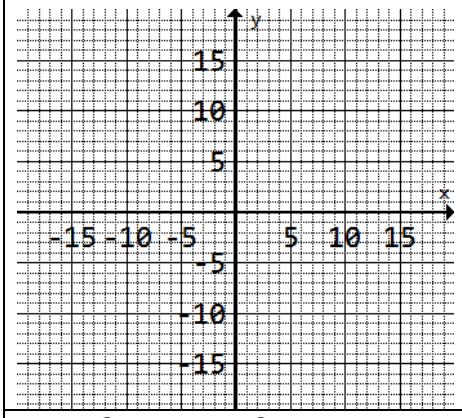
Practice: B-Level:

3. Rewrite the circle equations in graphing form, find the center and the radius of the circle and graph.

a) $x^2 + 6x + y^2 + 10y = 2$

Center:

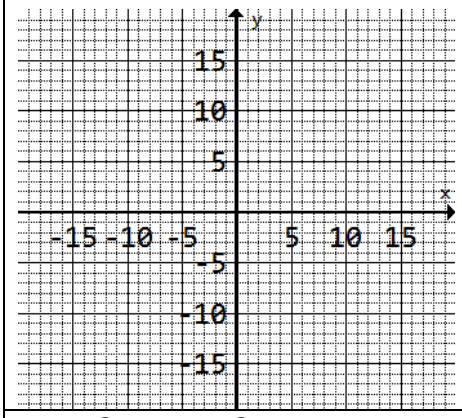
Radius:



b) $x^2 + 12x + y^2 + 2y = 12$

Center:

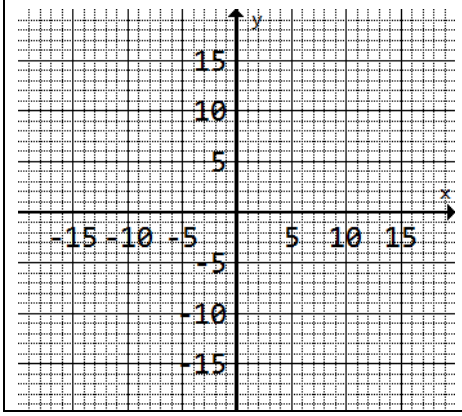
Radius:



c) $x^2 - 4x + y^2 - 6y = -4$

Center:

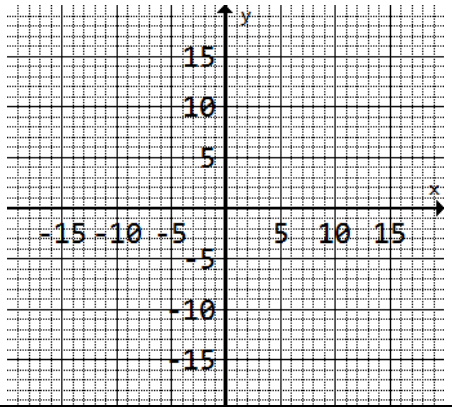
Radius:



d) $x^2 - 10x + y^2 + 16y = -8$

Center:

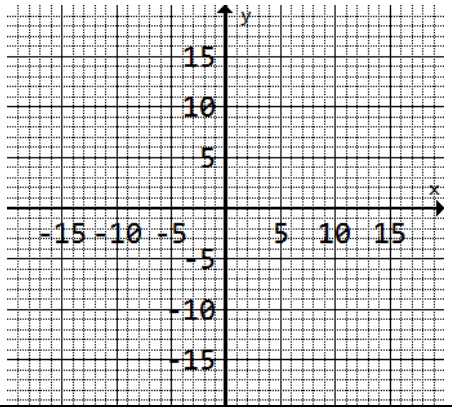
Radius:



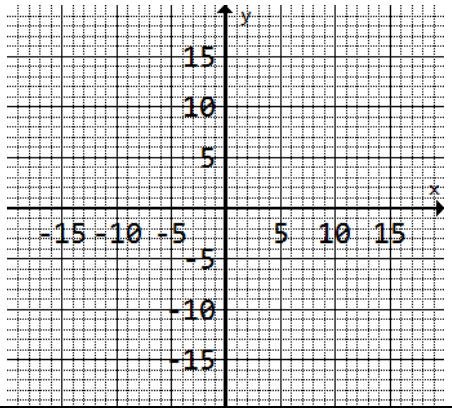
e) $x^2 + 6x + y^2 + 14y = 6$

Center:

Radius:



f) $x^2 + y^2 - 20y = -99$

Center:

Radius: