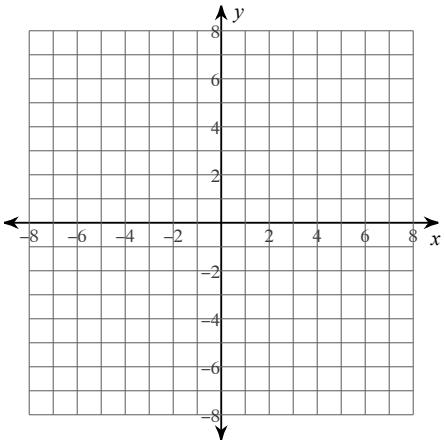
 Name_____

Conic Sections: Circles HW #1

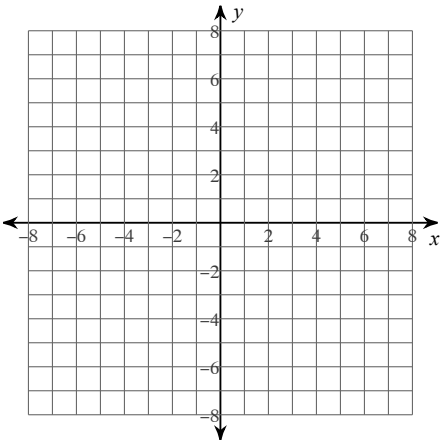
Date_____

Identify the center and radius of each. Then sketch the graph.

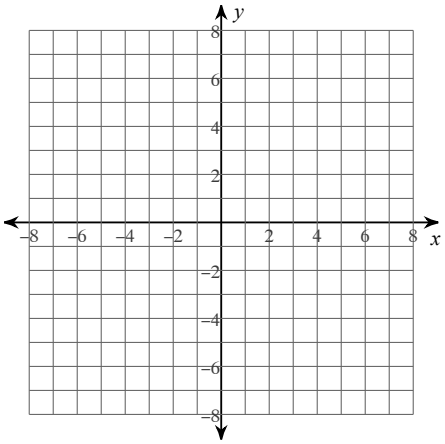
1) $x^2 + y^2 = 42$



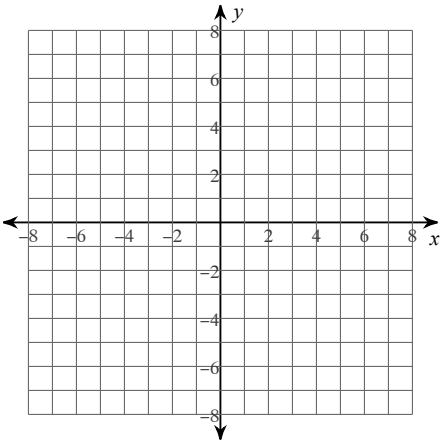
2) $x^2 + y^2 = 2$



3) $x^2 + y^2 = 33$



4) $x^2 + y^2 = 25$



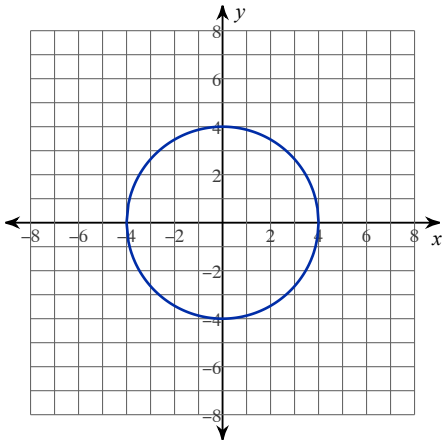
Identify the center and radius of each circle described by the equation:

5) $8x^2 - 120 = -8y^2$

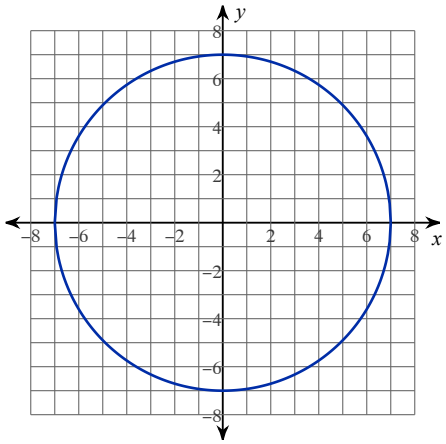
6) $-7x^2 + 567 = 7y^2$

Write the equation of the circle graphed below

7)

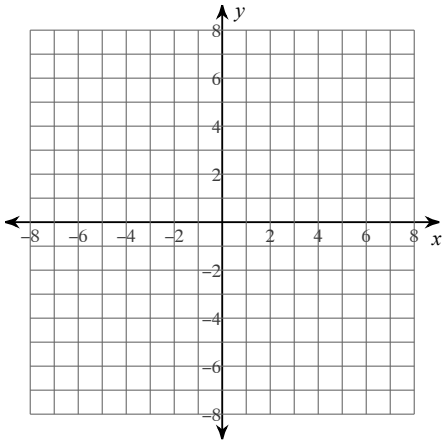


8)

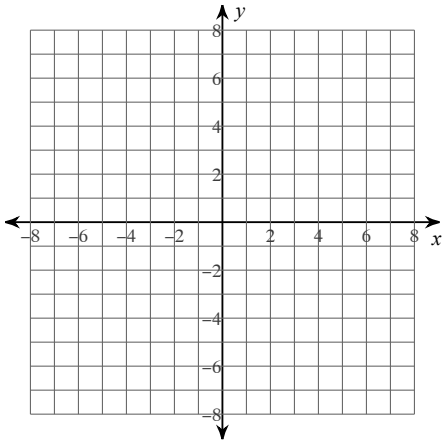


Identify the center and radius of each. Then sketch the graph.

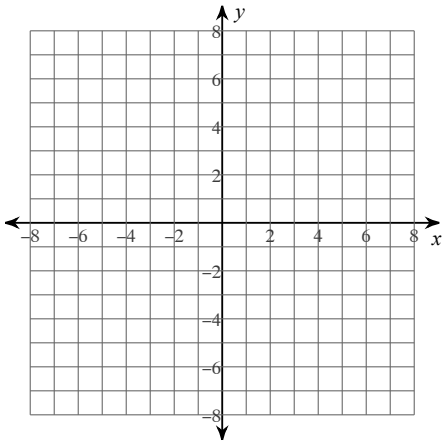
9) $(x-3)^2+(y-4)^2=4$



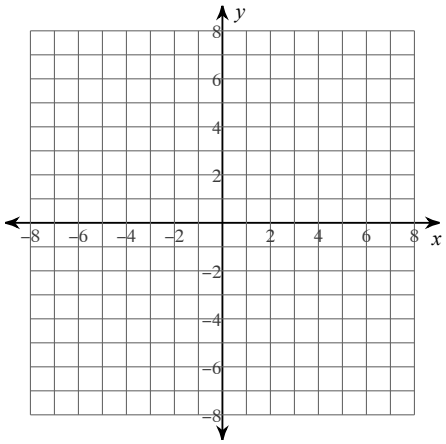
10) $x^2+y^2=36$



11) $(x+1)^2+(y-3)^2=1$

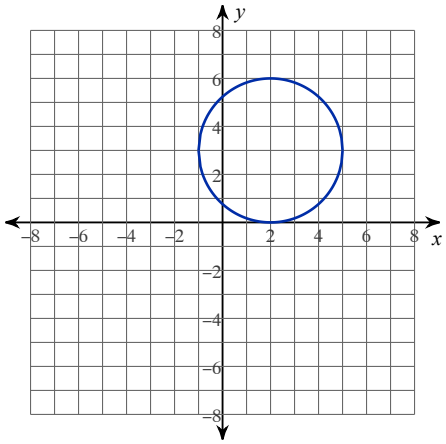


12) $(x+3)^2+(y-1)^2=16$

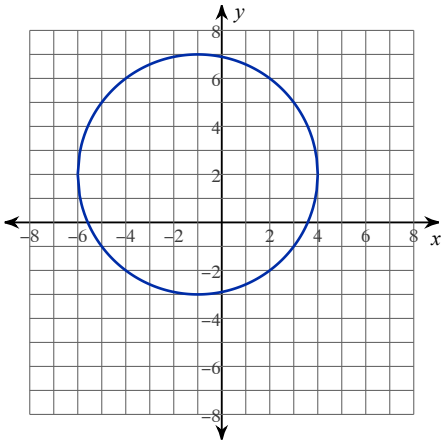


Write the equation of the circle graphed below

13)



14)



Identify the center and radius of each.

15) $x^2 + y^2 + 28x - 32y + 448 = 0$

16) $x^2 + y^2 - 22x + 26y + 254 = 0$

17) $x^2 + y^2 + 14x - 26y + 209 = 0$

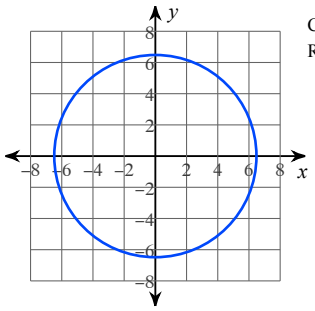
18) $x^2 + y^2 - 18x - 32y + 333 = 0$

19) $x^2 + y^2 - 6x - 26y + 162 = 0$

20) $x^2 + y^2 + 28x + 16y + 251 = 0$

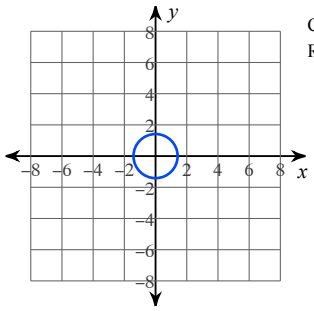
Answers to Conic Sections: Circles HW #1

1)



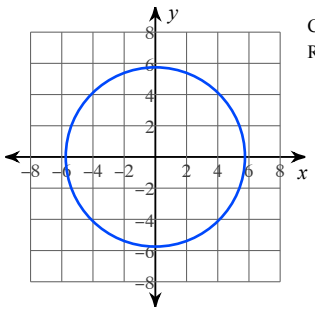
Center: $(0, 0)$
Radius: $\sqrt{42}$

2)



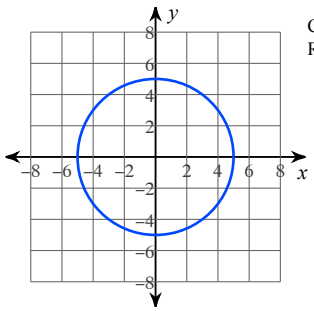
Center: $(0, 0)$
Radius: $\sqrt{2}$

3)



Center: $(0, 0)$
Radius: $\sqrt{33}$

4)



Center: $(0, 0)$
Radius: 5

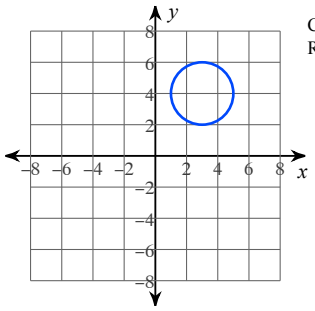
5) center = $(0,0)$
radius = $\sqrt{15}$

6) center = $(0,0)$
radius = 9

7) $x^2 + y^2 = 16$

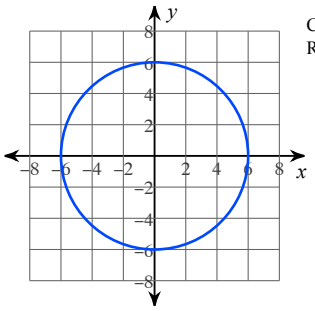
8) $x^2 + y^2 = 49$

9)



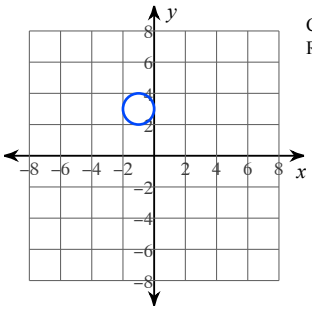
Center: $(3, 4)$
Radius: 2

10)



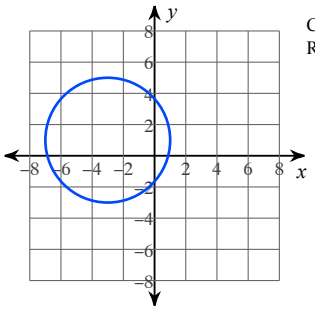
Center: $(0, 0)$
Radius: 6

11)



Center: $(-1, 3)$
Radius: 1

12)



Center: $(-3, 1)$
Radius: 4

13) $(x-2)^2 + (y-3)^2 = 9$

14) $(x+1)^2 + (y-2)^2 = 25$

15) Center: $(-14, 16)$
Radius: 2

16) Center: $(11, -13)$
Radius: 6

17) Center: $(-7, 13)$
Radius: 3

18) Center: $(9, 16)$
Radius: 2

19) Center: $(3, 13)$
Radius: 4

20) Center: $(-14, -8)$
Radius: 3