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Unit 10- Worksheet \#7: Equations of Circles
Write the standard equation of the circle.
1.

2.

3.

4.


Write the standard equation of the circle with the given center and radius.
5. Center ( $-4,1$ ); Radius 1
6. Center (6, -8); Radius 7
7. Center (-3, -4); Radius 5
8. Describe and correct the error in writing the equation of a circle.

An equation of a circle with center $(-3,-5)$ and radius 3 is $(x-3)^{2}+(y-5)^{2}=9$.

9. The standard equation of a circle is $(x-2)^{2}+(y+1)^{2}=16$, what is the diameter?

Use the given information to write the standard equation of the circle.
10. The center is $(1,2)$ and a point on the circle is $(4,2)$.
11. The center is $(-3,5)$ and a point on the circle is $(1,8)$.

Graph the equation.
12. $x^{2}+y^{2}=49$

14. $(x+3)^{2}+(y-5)^{2}=16$

13. $(x-4)^{2}+(y-1)^{2}=1$

15. $(x-6)^{2}+(y+3)^{2}=9$


