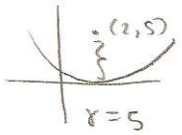
Algebra 2 Worksheet
Section 10.2 #1 - Circles

Name: Key

Period: __

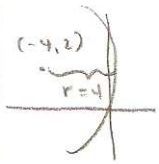
Complete this "mini-worksheet" in addition to the book assignment p.732-733 #2-8,23.

1. Write the equation of the circle with center $(2,5)$ and tangent to the x-axis.



$(x-2)^2+(y-5)^2=25$

2. Write the equation of the circle with center $(-4,2)$ and tangent to the y-axis.



$(x+4)^2+(y-2)^2=16$

3. Rewrite the circle $x^2+4x+y^2-8y=-11$ in standard form. Then find the center and the radius.

$x^2+4x+\underline{4}+y^2-8y+\underline{16}=-11+\underline{4}+\underline{16}$

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

center $(-2,4)$; $r=3$

4. Rewrite the circle $x^2+y^2-10x-11=0$ in standard form. Then find the center and the radius.

$x^2-10x+\underline{25}+y^2=11+\underline{25}$

$(x-5)^2+y^2=36$

center $(5,0)$; $r=6$

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Name: Key

Period: __

Complete this "mini-worksheet" in addition to the book assignment p.732-733 #2-8,23.

1. Write the equation of the circle with center $(2,5)$ and tangent to the x-axis.

2. Write the equation of the circle with center $(-4,2)$ and tangent to the y-axis.

3. Rewrite the circle $x^2+4x+y^2-8y=-11$ in standard form. Then find the center and the radius.

Same as above

4. Rewrite the circle $x^2+y^2-10x-11=0$ in standard form. Then find the center and the radius.