## Algebra II Worksheet \#8 Unit 7 page 1

Identify each of the following equations as that of a circle, an ellipse, a hyperbola, or a parabola. Then write the equation in standard form and sketch its graph.

1. $9 x^{2}+4 y^{2}-54 x+8 y+49=0$
2. $y^{2}+4 x-6 y+13=0$

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## Algebra II Worksheet \#8 Unit 7 page 2

Identify each of the following equations as that of a circle, an ellipse, a hyperbola, or a parabola. Then write the equation in standard form and sketch its graph.
3. $9 x^{2}-16 y^{2}+36 x-108=0$
4. $x^{2}+y^{2}+4 x-2 y-11=0$



## Algebra II Worksheet \#8 Unit 7 page 3

Identify each of the following equations as that of a circle, an ellipse, a hyperbola, or a parabola. Then write the equation in standard form and sketch its graph.
5. $4 x^{2}-y^{2}-8 x-2 y+19=0$
6. $4 x^{2}+4 y^{2}+8 x-21=0$



## Algebra II Worksheet \#8 Unit 7 page 4

Identify each of the following equations as that of a circle, an ellipse, a hyperbola, or a parabola. Then write the equation in standard form and sketch its graph.
7. $x^{2}+4 y^{2}-2 x+24 y+21=0$
8. $2 x^{2}-8 x-y+3=0$



