Algebra 2 Worksheet \#7 Unit 7 page 1
Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.

1. $4 x^{2}-9 y^{2}-8 x-54 y-113=0$
2. $x^{2}+9 y^{2}+2 x-18 y+1=0$



Algebra 2 Worksheet \#7 Unit 7 page 2
Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.
3. $x^{2}+y^{2}-6 x+8 y=0$
4. $x^{2}+2 x+4 y-11=0$



## Algebra 2 Worksheet \#7 Unit 7 page 3

Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.
5. $25 x^{2}+9 y^{2}+100 x-54 y-44=0$
6. $4 x^{2}+4 y^{2}-4 x+20 y+17=0$



## Algebra 2 Worksheet \#7 Unit 7 page 4

Identify each equation as that of a circle, ellipse, hyperbola, or parabola. Express the equation in standard form and sketch its graph. Show your work neatly organized.
7. $16 x^{2}-9 y^{2}+64 x+18 y+199=0$
8. $y^{2}-8 x+4 y-20=0$



