Conic Sections Review

Graph:







4.
$$(x+5)^2 + (y-2)^2 = 4$$



5. For $(x-1)^2 + (y+6)^2 = 144$, the center = (,) and the radius = _____.

6. For
$$\frac{(y-3)^2}{25} - \frac{(x+2)^2}{4} = 1$$
, a = _____, b = _____, c = _____

7. For $y = (x+7)^2 - 2$, the focus = (,) and equation of the directrix is y =_____.

8. For
$$\frac{(x+1)^2}{100} + \frac{(y+1)^2}{16} = 1$$
, a = _____, b = _____, c = _____

9. Write the equation of an ellipse, centered at the origin, with and the foci are (0, -5) and (0, 5), and the minor axis has a length of 4.

10. Write an equation of a hyperbola with foci (4, 2) and (4, 6), and vertices (4,3) and (4,5).