1. (13 pts) Find an equation of the line through the points $A = (-3, 5), B = (3, 3)$

2. (13 pts) Find an equation of the line parallel to $3x - 4y = 12$ and containing the point $(-2, 3)$.

3. (13 pts) Find an equation of the circle with center $(-4, 3)$ and with $(2, 5)$ on the circle.

4. (13 pts) Sketch and discuss the graph of $x^2 + y^2 - 8x + 6y - 11 = 0$. Specifically, identify: center and radius.

5. (13 pts) Sketch and discuss the graph of $9x^2 + 4y^2 = 36$. Specifically, identify: center, vertices, coverticies, foci, major axis, minor axis, eccentricity, directrices.


7. (13 pts) Sketch and discuss the graph of $x^2 + 9y^2 - 10x + 36y + 52 = 0$. Specifically, identify: center, vertices, coverticies, foci, major axis, minor axis, eccentricity, directrices.

8. (13 pts) Find an equation of a parabola with focus $(3, -5)$ and directrix $y = 1$. 