

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. **GOOD LUCK!!**

1. [5 points] An ellipse has foci at $(-3, 0)$ and $(3, 0)$ and semiminor axis 4. Find the vertices and write an equation for the ellipse.

3. [5 points] A hyperbola with vertices $(2, 4)$ and $(2, 6)$ has eccentricity 2. Find its foci, its asymptotes and give an equation for the hyperbola.