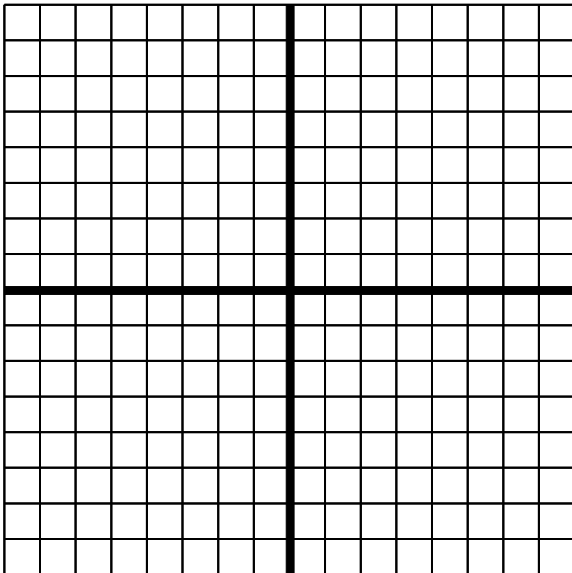
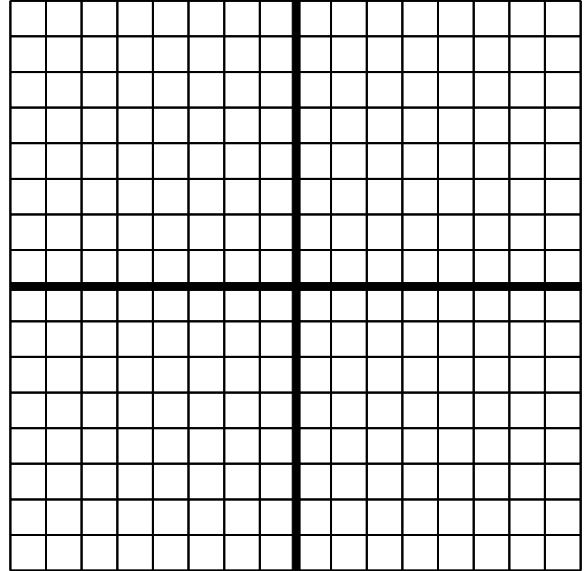


Section 1.1 - Graphs of Equations

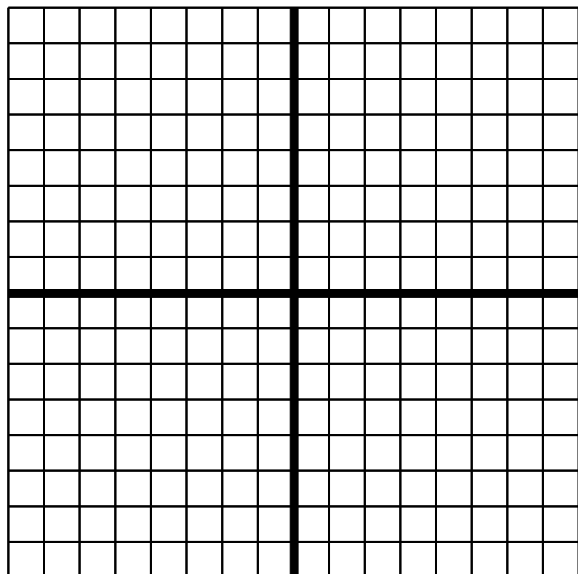
(Did you know: Chuck Norris can kill two stones with one bird.)

1. Given the points $(1.7, 6.5)$ and $(-3.2, 5.3)$, plot the points, find the distance between them and find the midpoint of the line connecting them.



2. Sketch the graph of the equation $4x^2 + 2y = 3$. Is it symmetric in any way?

3. Write the equation $4x^2 + 4y^2 - 4x + 2y - 1 = 0$ in standard form. Then sketch it.



4. A small meth lab is located at an undisclosed location 8 miles south and 4 miles west of Nacogdoches. If a chemical explosion occurs and everyone within 2 miles gets amped, write the equation of the circle at the edge of the epidemic.

5. A large math lab, located 2 miles due North of downtown Nacogdoches, calculates that they tweek everyone's mind within the circle determined by the equation $x^2 + y^2 - 4y - 3 = 0$, where x is miles East of Nac and y is miles North of Nac. What is the radius of the lab's influence?