## MATH 223 Selected Hints and Answers for Assignment 2 Chapter 2: 1, 4, 9, 10, 12, 13, 14

- 1:  $\frac{(x+1)^2}{25} + \frac{(y-2)^2}{9} = 1$
- **4:**  $\frac{x^2}{92.96^2} + \frac{y^2}{92.95^2} = 1$

**9:** Hint: Show that the distance between x and  $\frac{x+y}{2}$  equals the distance between y and  $\frac{x+y}{2}$ 

**10:** Use the fact that the distance between two vectors is the magnitude of their difference.

- **12:** The magnitude of the vector is  $\sqrt{39}$
- 13: Complete the squares in x and in y.
- **14:** Center is (1, 2, 3)