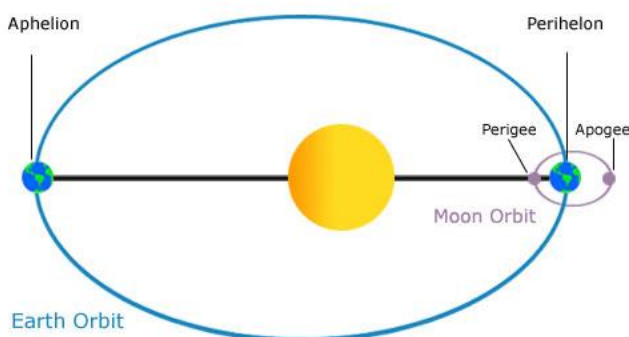MATH 223 Spring 2023
*Assignment 2*
**Due: Friday,February 14**

## Reading

Read carefully Sections 2.2 "Limits and Continuity" and 2.3 "Derivatives" in our text *Multivariable Calculus: A Linear Algebra Based Approach.*

## Writing

Write out careful and complete solutions of Exercises 1, 4, 9, 10, 12, 13, 14 in Chapter 2.



## Some Answers and Hints

**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 $\frac{x+y}{2}$**

**12. The magnitude of the vector is $\sqrt{39}$**

**13. Complete the squares in $x$ and in $y$.**

**14. Center is $(1, 2, 3)$**