

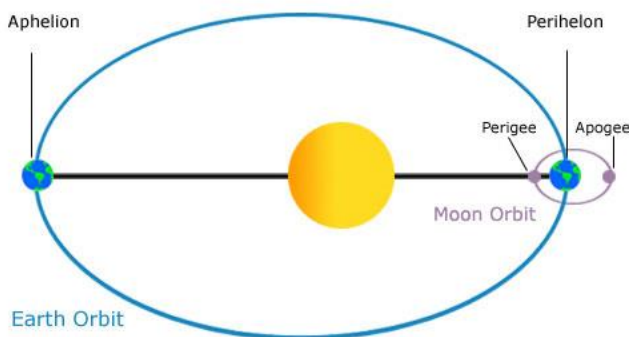
MATH 223 Fall 2023
Assignment 2
Due: Friday, September 15

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 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 $(1, 2, 3)$