

MATH 151 Homework 13

Due 2/27

Read Sections 3.5 and 3.6.

Do Section 3.5 Exercises 3, 6, 11, 18, 23, 35

Do Section 3.6 Exercise 6

Also, do the following exercises.

- SF37.** (a) Find the equation for the tangent line to the graph of $f(x) = \sin(x)$ at $x = 0$.
- (b) Find the equation for the tangent line to the graph of $f(x) = \sin(x)$ at $x = \pi/3$.
- (c) Use each tangent line to approximate $\sin(\pi/6)$. Would you expect these results to have the same accuracy, since they are taken equally far away from $x = \pi/6$ but on opposite sides? If the accuracies are different, can you account for the difference?