MATH 152 Assignment 7, Fall 2026.

Class, about 25% of the final exam marks (10% of your course grade) will be based on the material covered in this assignment.

Webassign Exercises

11.7 Exercises 9, 11, 19

11.8 Exercises 7, 12, 20

11.9 Exercises 7, 17, 29

11.10 Exercises 6, 12, 23, 41

Written Exercises

Answers to odd numbered exercises below are in the back of the textbook. Show your working.

1 11.7 Exercise 8

2 11.7 Exercise 36

3 11.8 Exercise 8

4 11.8 Exercise 15

5 11.9 Exercise 13

6 11.9 Exercise 31

7 Section 11.10 Find the Maclaurin series for $\cos x$.
Use formula $\boxed{7}$ on page 796 which requires you to compute and evaluate the first four derivatives of $\cos x$ at $x = 0$. Express your final answer in the form

$$a_0 + a_2x^2 + a_4x^4 + \cdots = \sum_{n=0}^{\infty} ?x^?.$$

Now use differentiation ($\sin x = -\cos' x$) to find the Maclaurin series for $\sin x$ from the Maclaurin series for $\cos x$.

8 11.10 Exercise 67