

Agenda/Objectives/Notes Calculus Section 2.3

Starter Problems

1. Show that the graph of $f(x) = 3x + \sin x + 2$ does not have a horizontal tangent line.
2. Find the average rate of change of the line $f(x) = -\frac{1}{x}$ over the interval $[1, 2]$.

Compare this average rate of change with the instantaneous rates of change at the endpoints of the interval.

Today's Agenda

1. Starter problems
2. Correct test
3. Today's objectives
4. Today's assignment: Read section 2.3, 126/1, 5, 9, 11, 13, 15, 17, 23, 25, 37, 41, 45, 51, 99

Today's Objectives: You will be able to

1. Use the product rule to find the derivative.
2. Use the quotient rule to find the derivative.
3. Find the derivative of a trigonometric function.
4. Find a higher-order derivative of a function