

## What Derivatives tell Us

This section was split into three parts. The first part was the **first derivative test**. The main point of this test is to see where a function is increasing or decreasing in order to find minimum or maximum points. The second part was about concavity and points of inflection. For this part, we used the second derivative. If the second derivative is positive the graph is concave upward and if the second derivative is negative the graph is concave downward. To find points of inflection you need to find where the concavity changes. The final part of this section was the second derivative test. The **second derivative test** helps us find minimum and maximum values. You must use the numbers from the first derivative in the second derivative to examine concavity.