

Math-71 Sections 9, 11, 12

## Homework #6

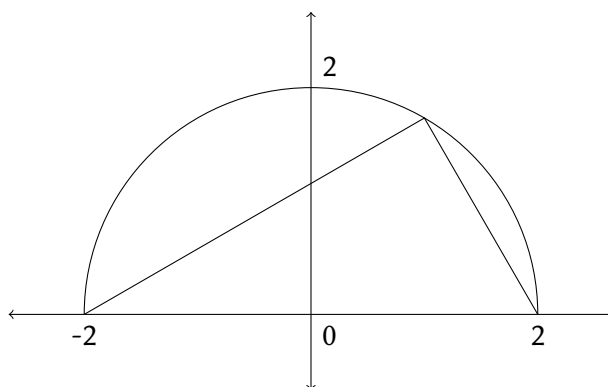
**Due: 3/19/2019 5:45pm**

### Reading

Read section 9.1

### Problem

A triangle is inscribed inside a semi-circle of radius 2 as shown below:



Find the maximum possible area of the inscribed triangle. Be sure to prove why it is a maximum by either a plausible explanation or by using the first or second derivative test.