

Math 180
Spring 2010

Name _____

Homework #11
Due Thursday, April 29
No Late Papers Accepted! No Excuses!

1. Find a , b , c , and d such that the cubic equation $f(x) = ax^3 + bx^2 + cx + d$ has a local maximum at $(3, 3)$; a local minimum at $(5, 1)$; and an inflection point at $(4, 2)$.

2. Twenty feet of wire is to be used to form an equilateral triangle and a square. How much should be used for each figure so that the total area enclosed is a maximum?

