

# Math 1080, Spring 2006, HW Set 7

Due on Thursday 03/09/06

You need to show all your work and explain with following the guideline described in the class webpage to get the full credit. And please staple your HW papers.

### HW 7 Due on Thursday 03/09/06

Before doing this HW, go over the algorithms of Bisection method and Newton's method with examples given in class.

1. Find an approximation of a solution to the equation  $x^3 + 6x - 3 = 0$  by using Bisection method with accuracy 0.09.
2. Find an approximation of a solution to the equation  $x^3 + 6x - 3 = 0$  by using Newton's method with accuracy 0.09.
3. Evaluate the following:

1. 
$$\sum_{k=1}^{20} (k^2 - k + 2) =$$

2. 
$$\sum_{k=10}^{30} 3 \left(\frac{1}{2}\right)^k =$$