

MATH 187 – Section 002 – Quiz 7

You may work with other class members on this quiz, but you may *not* receive assistance from people not in MATH 187, Section 002. You must show all of your work to receive full credit. Do all your work on other sheets of paper and be sure to staple all the pieces of paper together or YOU WILL GET A 'ZERO' ON THE QUIZ. Your work on this quiz must be handed in by the beginning of class on Friday, 21 March 2008. GOOD LUCK!

Use the technique of smallest counterexample (Section 20 in our text) to prove:

$$\sum_{i=1}^n i^2 = \frac{n(n+1)(2n+1)}{6}$$