

MATH 187 – Section 002 – Quiz 1

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, 1 February 2008. **GOOD LUCK!**

1) Consider the sentence: “The square of an odd integer is odd.”

a) How would you write this sentence in “if – then” form?

b) Recall that we have studied two statements that are logically equivalent to the statement “If A, then B.” Using each of these two alternates, how can you write the sentence above: “The square of an odd integer is odd.”

2) Consider the statement “A if and only if B”. We know that one strategy to prove this statement is to prove both “If A, then B” and “If B, then A”. But this is not the only such strategy. Write down every possible strategy that proves “A if and only if B”.