

**232 Quiz 4**

September 30, 2011

**Name:** \_\_\_\_\_**Section:** \_\_\_\_\_**Name:** \_\_\_\_\_

*Work in groups of THREE on each problem; do not split up problems or tasks. You must discuss each problem together and agree on a final solution. Hand in one quiz per group.*

*You may use your hand-written Notebooks but no other materials and no technology at all. Please keep your discussions quiet so as not to disturb or inform other groups.*

1. Find  $\lim_{x \rightarrow \infty} \frac{\tan^{-1} x}{\sec^{-1} x}$ . Justify your answer. INVERSE IS NOT RECIPROCAL

2. Given that  $\sum_{k=1}^4 a_k = 5$ ,  $\sum_{k=0}^4 b_k = 11$ , and  $a_0 = 3$ , find the value of  $\sum_{k=0}^4 (2a_k + 3b_k)$ . Please show your reasoning in order, not in a big jumble.