

Math 181

Quiz 9

Name: \_\_\_\_\_

October 15, 2002

Show all work for credit.

Leave all answers as exact answers unless otherwise stated.

1. A weather balloon is tethered so that it stays at a constant height of 250 meters. The wind blows it horizontally at a rate of 5 meters per second away from its original position. If the line is spooled out so that the altitude remains constant, how fast must the line be let out when the balloon lies over the point on the ground 300 meters from the spool?

2. (Bonus) What is the angle formed between the hour-hand and the minute-hand of a clock if the time is 2 : 00?