

Name: _____
Student ID: _____

Quiz 5

This quiz is graded out of 10 marks. No books, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. (4 marks) pg. 707 #15 A rectangular swimming pool 16 m by 10 m is being filled at a rate of $0.8 \text{ m}^3/\text{min}$. How fast is the height h of the water rising?

Question 2. (6 marks) pg. 707 #35 A weather balloon leaves the ground 275 m from an observer and rises vertically at 12 m/s . How fast is the line of sight from the observer to the balloon increasing when the balloon is 450 m high?