## Name: <br> Student ID:

## Quiz 7

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. ( 5 marks) pg. 723 \#18 A rectangular storage area is to be constructed along the side of a tall building. A security fence is required along the remaining three sides of the area. What is the maximum area that can be enclosed with 800 m of fencing?

Question 2. ( 5 marks) pg. 724 \#36 A cone-shaped paper cup is to hold $100 \mathrm{~cm}^{3}$ of $\mathrm{H}_{2} \mathrm{O}$. Find the height and radius of the cup that can be made from the least amount of paper.

