Name: _____

Student ID: _____

Quiz 3

This quiz is graded out of 10 marks. No books, calculators, 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. §2.3 #67 *(4 marks)* Given the supply and demand equations, where x represents the quantity demanded in units of a thousand and p the unit price in dollars, find the equilibrium quantity and the equilibrium price.

$$p = -2x^2 + 80 \text{ and } p = 15x + 30$$

Question 2.

   a. *(1 mark)* §12.1 #8 Convert the angle $330°$ to randian measure.

   b. *(1 mark)* §12.1 #14 Convert the angle $\frac{7}{6}\pi$ to degree measure.

Question 3. §12.2 #17 *(4 marks)* Find all values of θ that satisfy the equation over the interval $[0, 2\pi]$

$$\cot \theta = -\sqrt{3}$$