

## 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 #66 (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.

$$p = -x^2 - 2x + 100 \text{ and } p = 8x + 25$$

**Question 2.**

- (1 mark) §12.1 #10 Convert the angle  $-210^\circ$  to radian measure.
- (1 mark) §12.1 #16 Convert the angle  $-\frac{13}{12}\pi$  to degree measure.

**Question 3.** §12.2 #18 (4 marks) Find all values of  $\theta$  that satisfy the equation over the interval  $[0, 2\pi]$

$$\csc \theta = \sqrt{2}$$