Name: _____

Student ID: _____

Quiz 2

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. *(1 mark each)* Integrate the following indefinite integrals:

a.

$$\int \frac{1}{x^{1/3}}\, dx$$

b.

$$\int \sec x\, dx$$

c.

$$\int \cot x\, dx$$

d.

$$\int \frac{1}{\sqrt{3-x^2}}\, dx$$

e.

$$\int \frac{1}{x}\, dx$$

f.

$$\int \sin x\, dx$$

Question 2. *(4 marks)* §4.7 #25 Find $f(\theta)$.

$$f''(\theta) = \sin\theta + \cos\theta, \quad f(0) = 3, \quad f'(0) = 4$$