

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.

$$\int \frac{1}{x^{3/7}} dx$$

b.

$$\int \sec x dx$$

c.

$$\int \cot x dx$$

d.

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

e.

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

f.

$$\int \sin x dx$$

**Question 2.** (4 marks) §4.7 #29 Given that the graph of  $f$  passes through the point  $(1, 6)$  and that the slope of its tangent line at  $(x, f(x))$  is  $2x + 1$ , find  $f(2)$ .