

Name: _____ Student Number: _____

Department: _____ Signature: _____

Question 1.(7 pts) Evaluate

$$\int \sin(2\theta + 10) \cos^4(\theta + 5) d\theta.$$

Solution:

Question 2.(3 pts) Solve the differential equation

$$\frac{dy}{dx} = \frac{\sqrt{x}}{y^2}$$

Solution: