

Math 1172 - Autumn 2015

Name: _____

Quiz 4 - In Class

Recitation Instructor: _____

SHOW ALL WORK!!! Unsupported answers might not receive full credit.

Problem 1 [6 points] Evaluate the integral.

$$\int \sin^8(5\theta) \cos^3(5\theta) d\theta$$

SHOW ALL WORK!!! Unsupported answers might not receive full credit.

Problem 1 [4 points] Find an appropriate trigonometric substitution of one of the forms $x = C \sin \theta$, $x = C \sec \theta$, or $x = C \tan \theta$ to simplify the integral given below. Simplify the integrand as much as possible and evaluate.

$$\int \frac{x^4}{(4+x^2)^{3/2}} dx$$