

# HOMEWORK QUIZ 8

Math 1910

NAME: \_\_\_\_\_

26 October 2017

- (1) Evaluate the integral:  $\int \sin^2(\theta) \cos^2(\theta) d\theta$ . You may use the reduction formula

$$\int \sin^n(x) dx = -\frac{1}{n} \sin^{n-1}(x) \cos(x) + \frac{n-1}{n} \int \sin^{n-2}(x) dx$$

(2) Evaluate the integral:  $\int_1^2 x \ln(x) dx$ .

## §8.2 (TRIG INTEGRALS)

11 July 2018

NAME: \_\_\_\_\_

(1) Evaluate the integral.

$$(a) \int \cos(x) \sin^5(x) dx$$

$$(b) \int \tan(x) dx$$

$$(c) \int \cos^2(4x) dx$$

$$(d) \int \tan^3(x) \sec(x) dx$$

$$(e) \int \sin^3(x) \cos^3(x) dx$$

$$(f) \int x \sec^2(x) dx$$

$$(g) \int \sin^4(x) \cos^2(x) dx$$

$$(h) \int \frac{\cos^5(x)}{\sin^3(x)} dx$$

$$(i) \int_0^\pi \sin(2x) \sin(x) dx$$