

Math 193 – Test #1: Form A

Jan 27, 2017

Name: _____

Instructor: Patricia Wrean

Total: 25 points

Evaluate the following integrals.

1. $\int_0^1 \frac{6e^x dx}{\sqrt{3e^x + 2}}$ (4 points)

2. $\int \frac{24dp}{4p^2 + 1}$ (3 points)

3. $\int (5 + e^{-3y})^2 dy$

(3 points)

4. $\int \frac{\sin 2x}{1 - \cos^2 x} dx$

(4 points)

5. $\int \frac{e^{3\cot\theta}}{\sin^2\theta} d\theta$

(3 points)

6. $\int \frac{2x+12}{x^2-9} dx$

(4 points)

7. Use integration by parts to evaluate the following integral. You may use the table method if you wish. (4 points)

$$\int \sqrt{x} \ln x \, dx$$