

Name: _____ Sort #: _____

Worksheet 2
The Substitution Rule

MATH 2205, Fall 2018

Evaluate the following integrals

1. $\int x\sqrt{x+2} \, dx$

2. $\int \sin(\theta) \sin(\cos(\theta)) \, d\theta$

3. $\int \frac{t}{1+t^4} \, dt$

4. $\int_e^{e^4} \frac{1}{x\sqrt{\ln x}} dx$

5. If f is continuous and $\int_0^9 f(x) dx = 4$, find $\int_0^3 xf(x^2) dx$