

Quiz 1: Calc 1 Review
August 26th, 2016

Don't forget your name: _____

Score: _____ /20

1) Differentiate each of the following.

(2 pts) $f(x) = \sqrt{x} + x^4$

(2 pts) $g(x) = x^2 \sin(x^2)$

(2 pts) $h(x) = 2 \sin(x) \cos(x)$

(2 pts) $xy^2 = \cos(x) + y$

(2 pts) $(x + y)^5 = 4$

2) Evaluate each of the following integrals.

(2 pts) $\int \sqrt[3]{x^2} dx$

(2 pts) $\int x\sqrt{1+x^2} dx$

(2 pts) $\int x^3\sqrt{1+x^2} dx$

(2 pts) $\int_0^1 x^2 - x^3 dx$

(2 pts) $\int_0^\pi \sin(x) \cos(x) dx$

rules:

1. This review does not claim to be (nor is it) comprehensive. It is intended to help you prepare for the course.
2. *This will be presentation quality.* Papers with scratch work or large erasures will not be graded.
3. This is due at 9:40 AM on Monday, August 29th.