Math 2300-013: Quiz 1

Name: _____   Score: _____

1. (2 points) Integration by parts and u/du-substitution are two techniques for finding antiderivatives. To which rules for derivatives are they related?

   (a) Integration by parts comes from the _____ rule for derivatives.

   (b) u/du substitution comes from the _____ rule for derivatives.

2. (7 points) Evaluate the following integrals. Show all work.

   (a) $\displaystyle \int \frac{\cos\theta}{1+\sin^2\theta}\, d\theta$

   (b) $\displaystyle \int_1^4 \frac{\ln(x)\sqrt{\ln(x)+1}}{x}\, dx$

3. (1 point) I have turned in the last sheet from syllabus?

   (a) Yes.

   (b) No.