

RECITATION: WEEK 8
DERIVATIVE PROFICIENCY PRACTICE GUIDELINES FOR TA'S

1. Remind students that they will take a Derivative Proficiency on Thursday. Ask them if they have questions. The facts are listed below.
 - You have 1 hour to complete it.
 - No notes or other aids.
 - No simplification is needed.
 - No partial credit.
 - Answers will be read as written. So $(x + 1) \sin(x) \neq x + 1 \cdot \sin(x)$.
 - You have a total of three opportunities to take a Derivative Proficiency. Your high score will count in your grade.
 - Graded proficiencies will be returned in class on Friday. The retake will be on Thursday (outside of class) after Spring Break.
2. Ask students what sort of things they will need to know and what to expect. Here are things that should be mentioned.
 - You must know how to take the derivative of sine, cosine, tangent and secant. Typically cotangent OR cosecant appear, but you can always convert to sines and cosines.
 - You must know how to take the derivative of e^x and $\ln(x)$. Alternate bases will not appear (like 2^x and $\log_2(x)$).
 - There are multiple problems that require the chain rule and at least two double chain rules always appear.
 - The product rule always appears. There is always a problem for which the quotient rule is probably easier than rewriting and doing a product rule.
 - The last problem is always an implicit differentiation problem.
 - There are problems for which simplification or some algebraic preprocessing is either required or will make the problem much easier.