

Math 0230

## Quiz 2

Fall 2014

**Your name:** \_\_\_\_\_

Time: 20 minutes

**Your TA's name:** \_\_\_\_\_

No calculators, no notes, no books are permitted.

SHOW ALL WORK (no work = no credit). Write neatly. Simplify your answers.

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1. [5 points] Evaluate the integral  $I = \int \cos^2 x \tan^3 x \, dx$ .

2. [5 points] Evaluate the integral  $I = \int_1^2 \frac{6 \, dx}{x^2 - 3x} \, dx$ . Simplify your answer.

bonus problem [5 points extra] Evaluate the integral  $I = \int \frac{dx}{x^2\sqrt{x^2-9}}$ .  
Simplify your answer. Write it in terms of  $x$ .