

Quiz #4, 2/9  
Math 157 (Calculus II), Spring 2023

Problem 1 is worth 5 points and Problem 2 is worth 5 points, for a total of 10 points. Remember to *show your work* on all problems!

1. Compute the indefinite integral  $\int \sin^2(x) \cos^3(x) dx$ .

2. Compute the definite integral  $\int_0^1 \frac{1}{\sqrt{4-x^2}} dx$  using a trigonometric substitution.  
Express your answer in the simplest form that you can.