

To receive credit you MUST SHOW ALL YOUR WORK.

1. (6 pts) Evaluate each integral:

(a) $\int_1^4 \frac{1}{x\sqrt{x}} dx$

(b) $\int_0^{5\pi/6} |\cos x| dx$

2. (5 pts) Given that $F(x) = \int_0^x \ln(1+t^2) dt$, find $F''(x)$.