

Name \_\_\_\_\_ Student number \_\_\_\_\_ Quiz section: \_\_\_\_\_

**1 :** (6 pts) Evaluate

$$\int_e^{e^4} \frac{dx}{x\sqrt{\ln x}}.$$

**2 :** (7 pts) Find an antiderivative of  $f(x) = x^2 \cos(x^3)$ .

**3 :** (7 pts) A tomatoes velocity at time  $t$  is given by  $v(t) = \sin t(\cos t)^3$ . Find the tomatoes displacement from  $t = 0$  to  $t = \pi/4$ .