

## Math 2260 Quiz 4

Name \_\_\_\_\_

*Points will be deducted for untidy or disorganized answers*

1. Let  $\mathcal{C}$  denote the portion of the curve  $y = \sqrt{x}$  that lies between the lines  $x = 1$  and  $x = 4$ .

(a) (1 point) Set up, but do not evaluate, two integrals, one in the variable  $x$  and one in the variable  $y$ , for the length of  $\mathcal{C}$ .

(b) (4 points) Set up, but do not evaluate, two integrals, one in the variable  $x$  and one in the variable  $y$ , for the area of the surfaces generated by revolving  $\mathcal{C}$  about:

i. the  $x$ -axis

ii. the  $y$ -axis

iii. the line  $x = -2$

iv. the line  $y = 3$