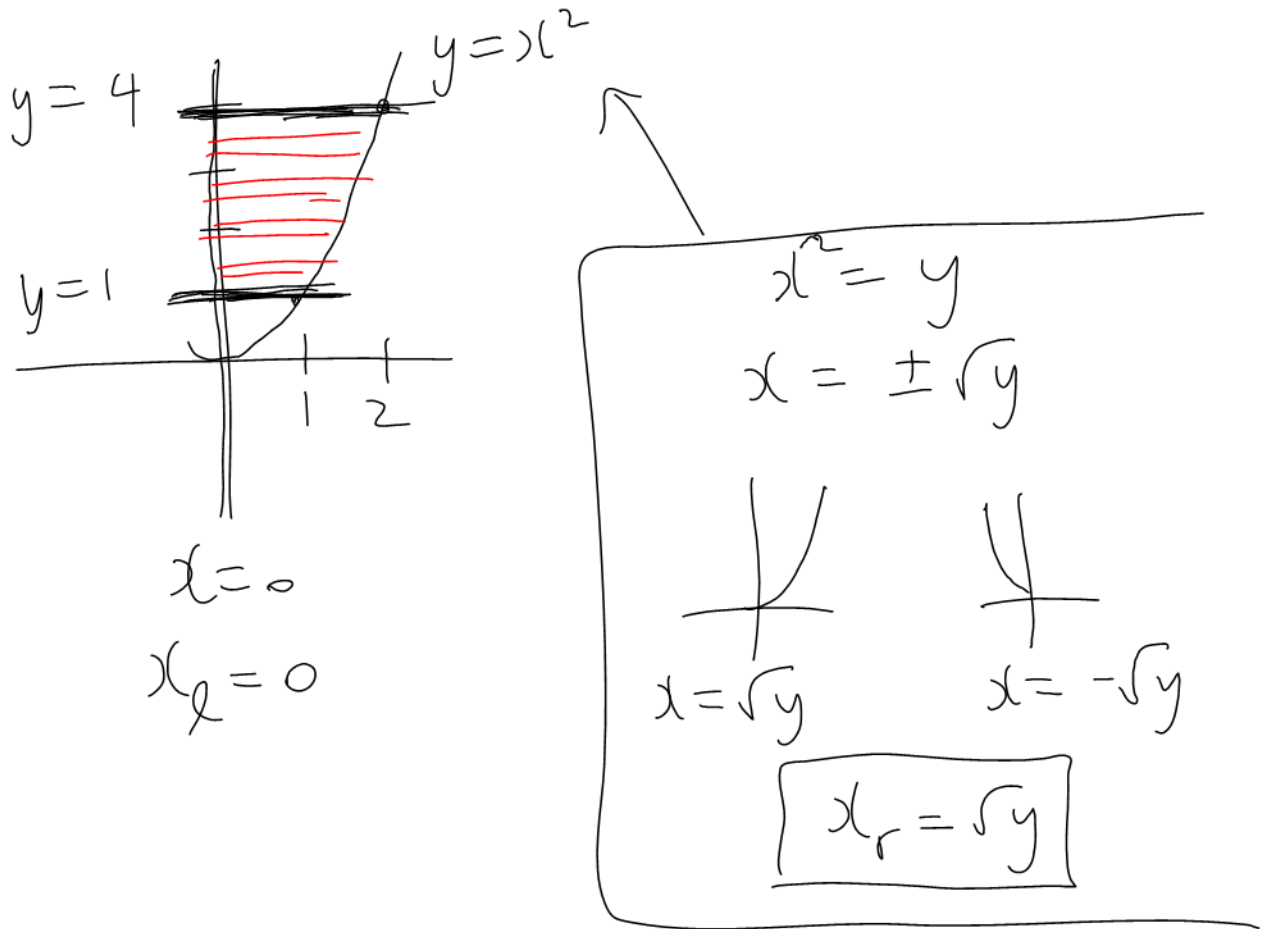


Name: _____

Find the first-quadrant area bounded by $x = 0$, $y = 1$, $y = 4$ and $y = x^2$.



$$\begin{aligned} A &= \int_c^d (x_r - x_l) dy \\ &= \int_1^4 (\sqrt{y} - 0) dy \\ &= \frac{2}{3} y^{3/2} \Big|_1^4 \\ &= \frac{2}{3} (8) - \frac{2}{3} \\ &= \frac{14}{3} \end{aligned}$$