

Quiz 3

Name: _____

1. Let D be the region bounded by the x axis, the lines $x = 1$ and $x = 4$ and the graph $y = 10 - \frac{1}{6}x^2$.

(a) Make a rough sketch of the region D .

(b) Find the area of D .

2. Let Ω region bounded by the x axis, the lines $x = 1$ and $x = 10$ and the graph $y = \frac{1}{x^2}$. Then find the volume when this region is rotated about the x axis.

3. Set up the integral for the length of the curve $y = \tan(x)$ for $0 \leq x \leq \pi/4$.