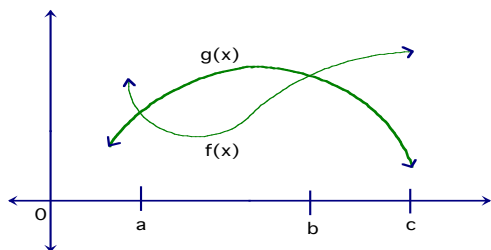


HW 7.4 Arc length

Name _____

1) Set up equations that would find perimeter around enclosed region.



Find the arc length of the graph of the function over the indicated interval . (Show work)

2) $y = \frac{3}{2}x^{2/3}$, $[1,8]$

3) $y = \ln(\cos x)$, $\left[0, \frac{\pi}{3}\right]$

Find the arc length of the graph of the function over the indicated interval . (Set up and calculate)

4) $y = \frac{1}{x}$, $1 \leq x \leq 3$

5) $y = \sin x$, $0 \leq x \leq \pi$

6) $y = \ln x$, $1 \leq x \leq 5$

7) $x = \sqrt{36 - y^2}$, $0 \leq y \leq 3$

Find the perimeter of the enclosed region (Set up and calculate)

