(8.1) Arc Length

Full Name: _____

Find the length of the arc of each curve on the interval of interest.

1. $f(x) = x^{3/2}$ on $[0, 4]$

2. $f(x) = 1 + 6x^{3/2}$ on $[0, 1]$

3. $y = \dfrac{x^5}{10} + \dfrac{1}{6x^3}$ on $[2, 5]$

4. $y = \ln(\sec x)$ on $[0, \pi/4]$