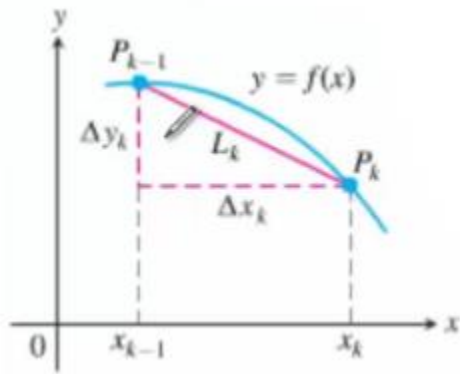


Arc Length

If f' is continuous on $[a, b]$,



$$\sum_{k=1}^n L_k =$$

$$\int ds = \int \sqrt{(dx)^2 + (dy)^2} =$$

Math 141 - Calculus
Section 6.4 Video Worksheet

Name _____

$$\int ds = \int \sqrt{(dx)^2 + (dy)^2} =$$

$$y = x^{3/2} \quad 0 \leq x \leq 4$$

$$x = \frac{y^{3/2}}{3} - y^{1/2} \quad 1 \leq y \leq 9$$

$$x = \int_0^y \sqrt{\sec^2 t - 1} dt \quad -\frac{\pi}{3} \leq y \leq \frac{\pi}{4}$$