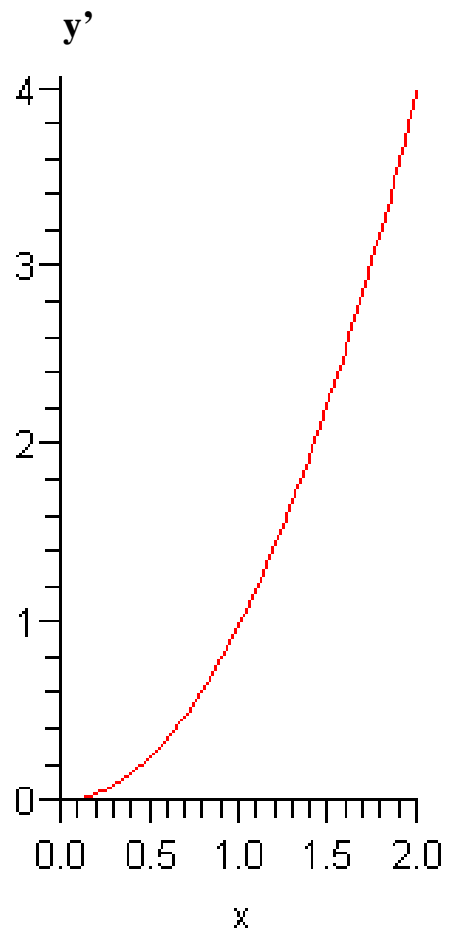
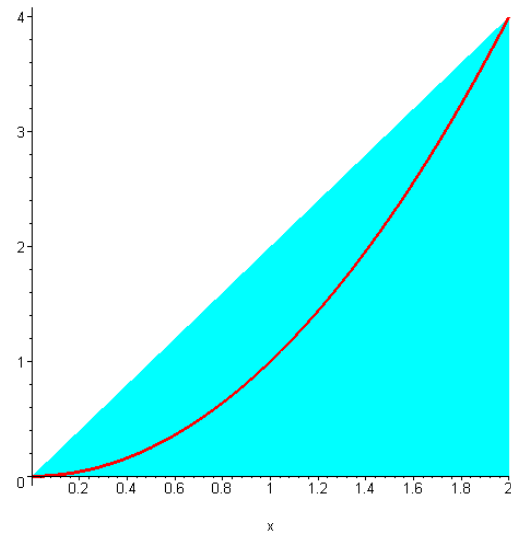


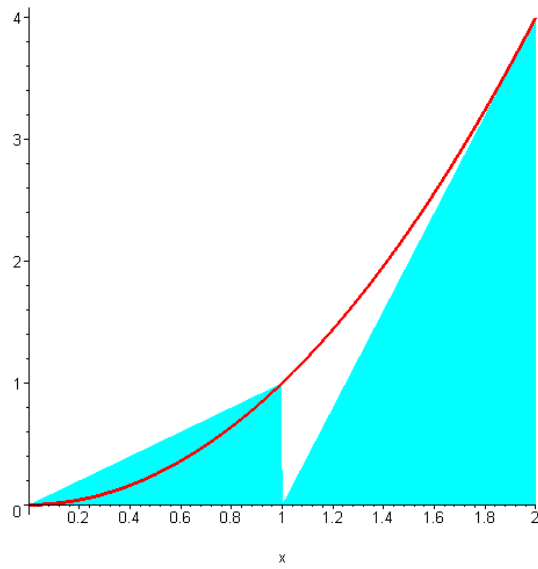
Overhead 1, Graph 1:



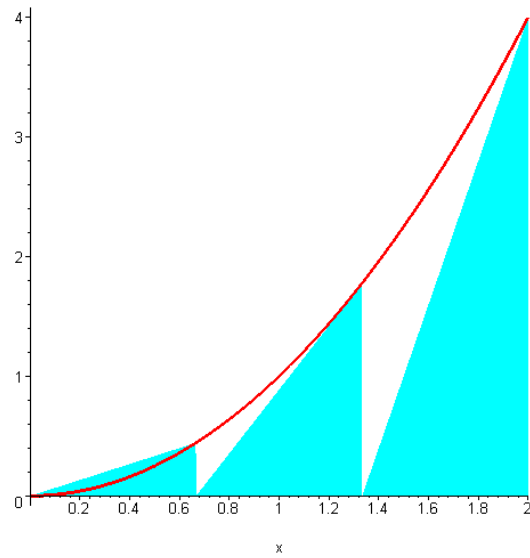
Overhead 2, Graph 2:



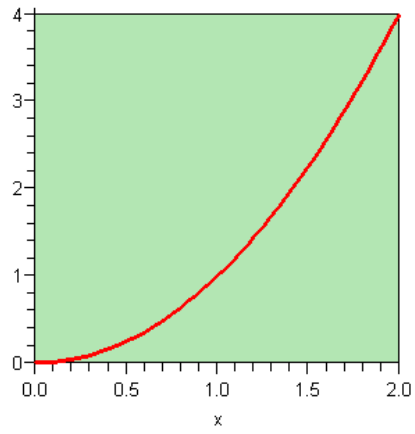
Overhead 2, Graph 3:



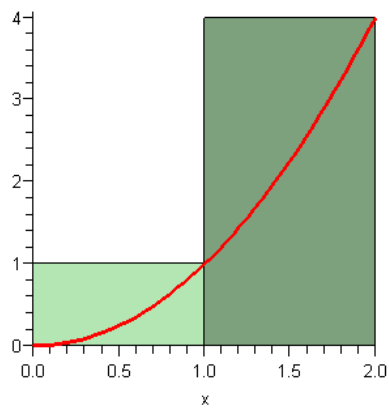
Overhead 2, Graph 4:



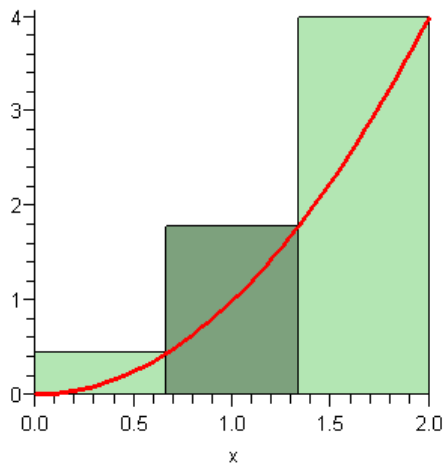
Overhead 3, Graph 5:



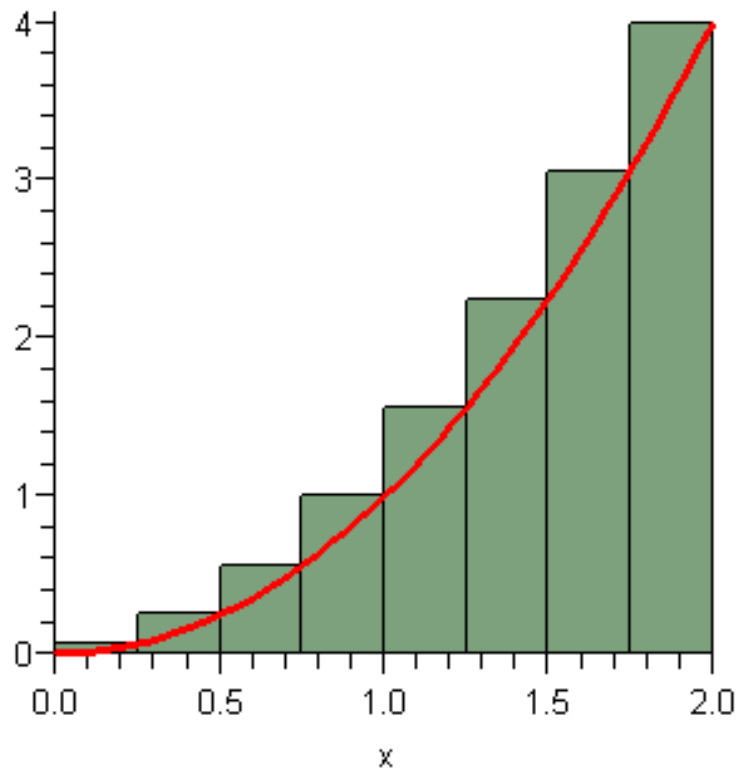
Overhead 3, Graph 6:



Overhead 3, Graph 7:



Overhead 4, Graph 8



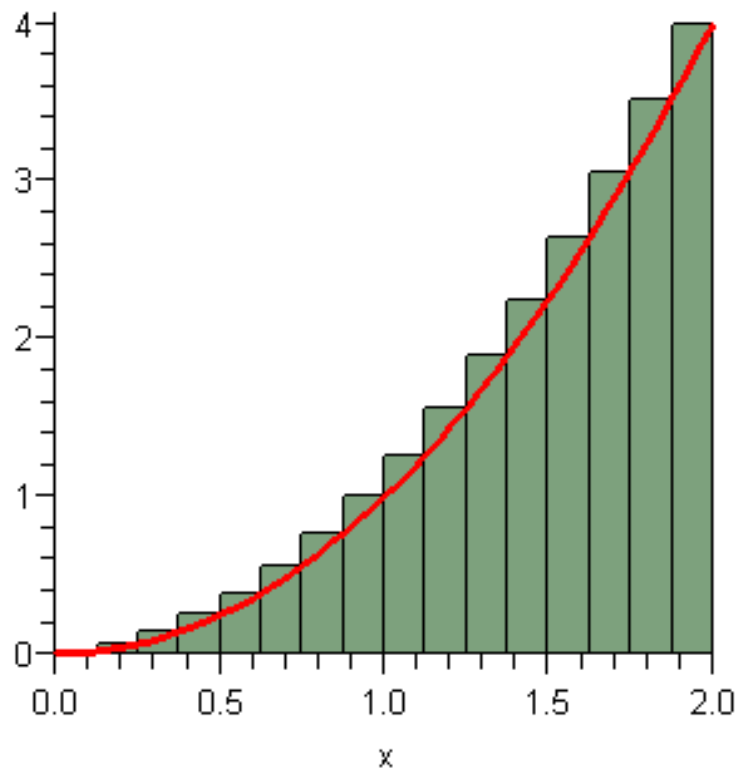
**8 Rectangles**

$$\Delta x = \frac{2-0}{8} = 0.25$$

**Area**

$$\begin{aligned} &\approx 0.25 * f(0.25) + 0.25 * f(0.5) + 0.25 * f(0.75) + 0.25 * f(1) + 0.25 * f(1.25) + 0.25 * f(1.5) + \\ &0.25 * f(1.75) + 0.25 * f(2) \\ &= 0.25 * 0.0625 + 0.25 * 0.25 + 0.25 * 0.5625 + 0.25 * 1 + 0.25 * 1.5625 + 0.25 * 2.25 + 0.25 * 3.0625 + 0.25 * 4 \\ &= 0.015625 + 0.0625 + 0.140625 + 0.25 + 0.390625 + 0.5625 + 0.765625 + 1 \\ &= \mathbf{3.1875} \end{aligned}$$

Overhead 5, Graph 9:



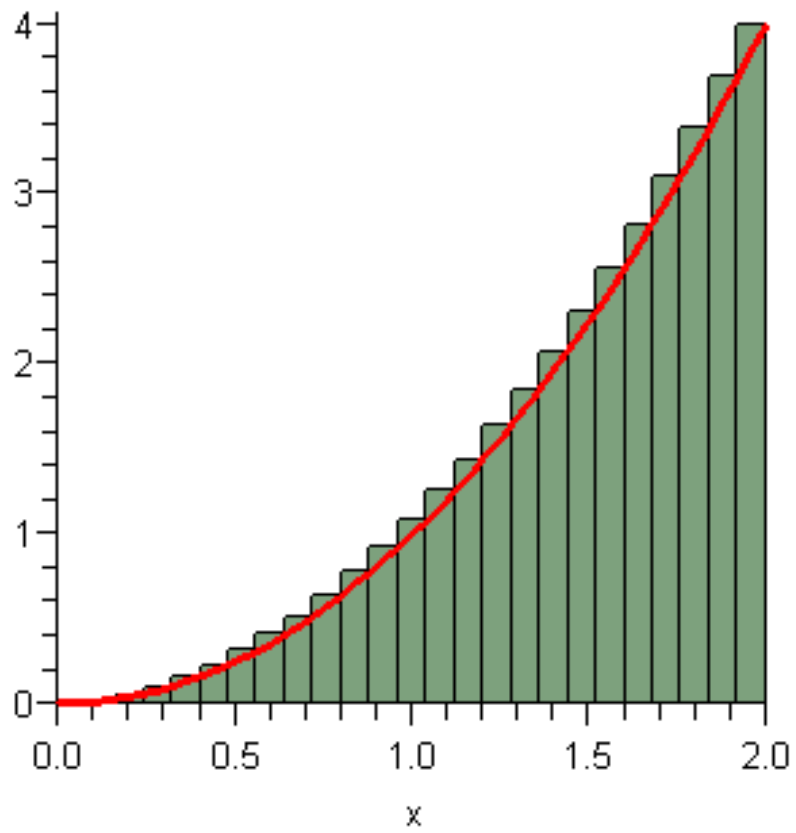
**16 Rectangles**

$$\Delta x = \frac{2-0}{16} = 0.125$$

$$\begin{aligned} \text{Area} &\approx 0.125*f'(0.125) + 0.125*f'(0.25) + 0.125*f'(0.375) + 0.125*f'(0.5) + \\ &0.125*f'(0.625) + 0.125*f'(0.75) + 0.125*f'(0.875) + 0.125*f'(1) + \\ &0.125*f'(1.125) + 0.125*f'(1.25) + 0.125*f'(1.375) + 0.125*f'(1.5) + \\ &0.125*f'(1.625) + 0.125*f'(1.75) + 0.125*f'(1.875) + 0.125*f'(2) \\ &= 0.125*0.015625 + 0.125*0.0625 + 0.125*0.170625 + 0.125*0.25 + \\ &0.125*0.390625 + 0.125*0.5625 + 0.125*0.765625 + 0.125*1 + 0.125*1.26563 + \\ &0.125*1.5625 + 0.125*1.89063 + 0.125*2.25 + 0.125*2.64063 + 0.125*3.0625 + \\ &0.125*3.51563 + 0.125*4 \end{aligned}$$

$$= 2.9218$$

Overhead 6, Graph 10:

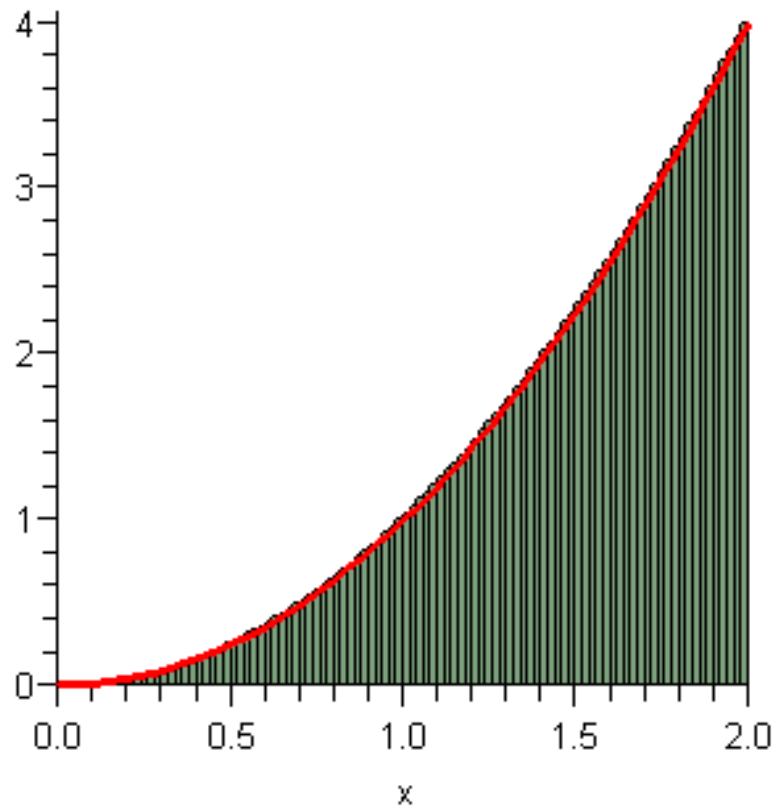


**25 rectangles**

$$\Delta x = \frac{2 - 0}{25} = 0.08$$

**Area  $\approx$  2.828800000**

Overhead 7, Graph 11:



**100 rectangles**

$$\Delta x = \frac{2-0}{100} = 0.02$$

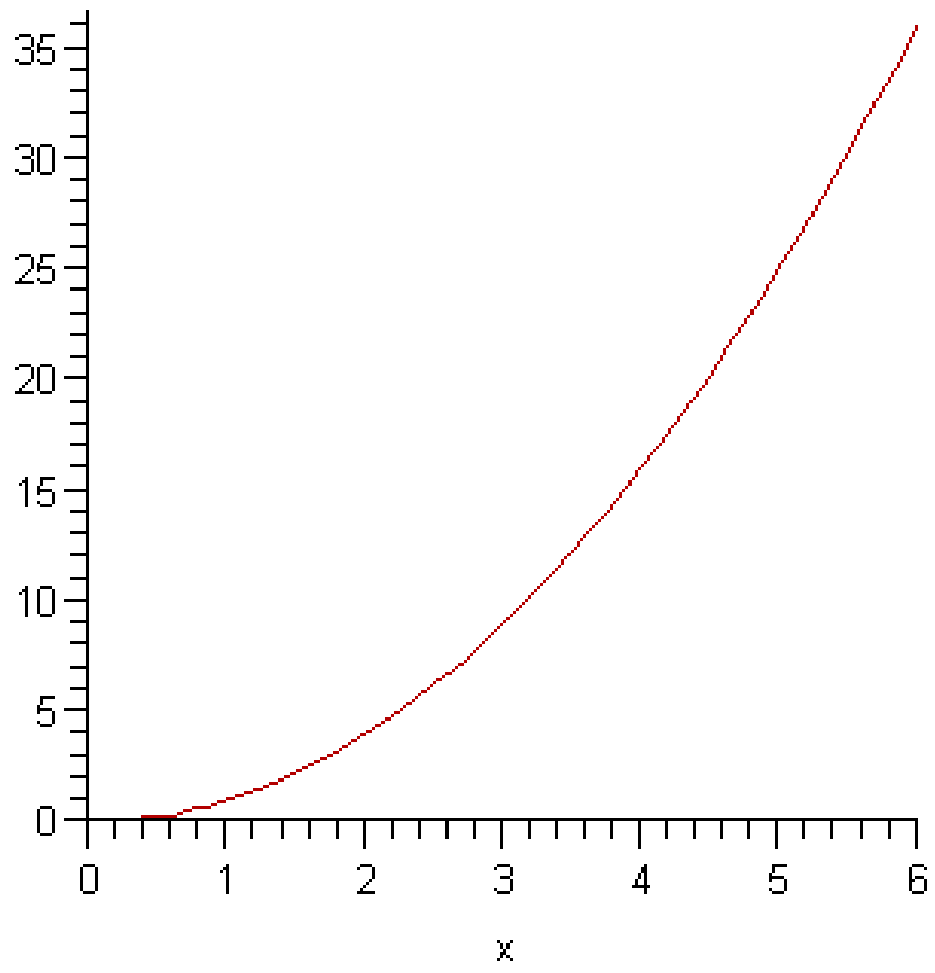
**Area  $\approx$  2.706800000**

Overhead 8, Table 2

<b>Number of Rectangles</b>	<b>Sum of the Areas of the Rectangles</b>
1 Rectangle	8
2 Rectangles	5
3 Rectangles	4.14815
8 Rectangles	3.1875
16 Rectangles	2.92188
25 Rectangles	2.8288
100 Rectangles	2.7068
1,000 Rectangles	2.670668
10,000 Rectangles	2.667066680



Overhead 9, Graph 12



Overhead 10:

