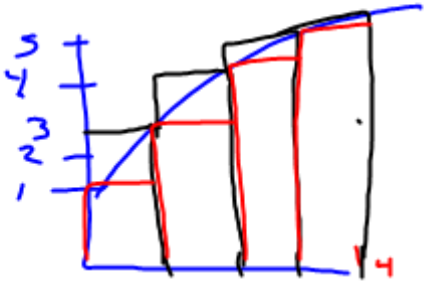


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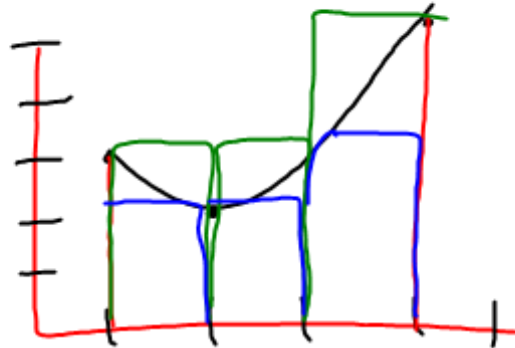


$$\Delta x = \frac{b-a}{n} = \frac{4-0}{4} = 1$$

$$S_{(\text{over})} = (1)(3) + 4(1) + \frac{9}{2}(1) + 5$$

$$S_{(\text{over})} = \left(1 + 3 + \frac{9}{2} + 4\right)(1)$$

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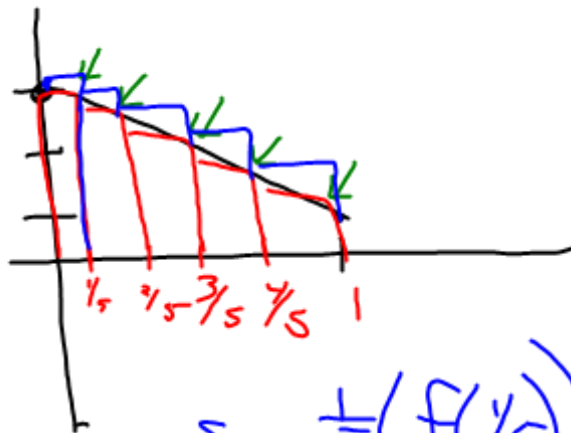
$$\Delta x = \frac{4-1}{3} = \frac{3}{3} = 1$$

$$\text{Over} = S = (1)(3) + (1)(3) + (1)(5) = 11$$

$$\text{Under} = S = (1)(2) + (1)(2) + (1)(3) = 7$$

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 $y = -2x + 3$

$n = 5$
 $\Delta x = \frac{1-0}{5} = \frac{1}{5}$



$$S = \frac{1}{5}(f(\frac{1}{5})) + \frac{1}{5}(f(\frac{2}{5})) + \frac{1}{5}(f(\frac{3}{5})) + \frac{1}{5}(f(\frac{4}{5})) + \frac{1}{5}(f(1))$$

$$S = \frac{1}{5}(f(0))$$