

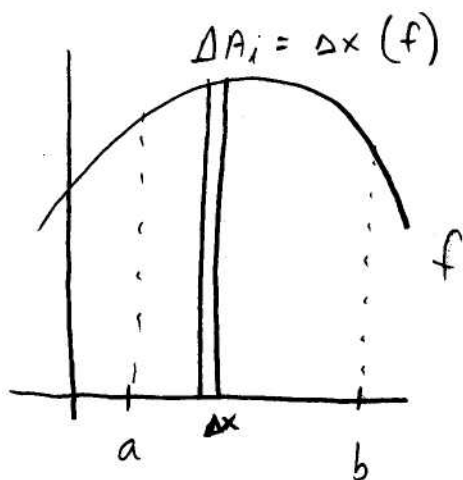
Calc BC

Section 7.2

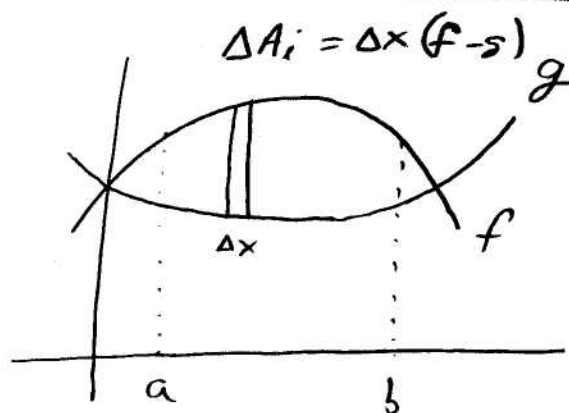
Area between two  
curves

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Warm-up: Find the area under  $y = x^2 + 2$   
from  $x = 0$  to  $x = 4$



$$\text{Area} = \int_a^b f \, dx$$



$$\text{Area} = \int_a^b (f - g) \, dx$$

To find the area between two curves on an interval, simply take the integral of the top curve minus the bottom curve

If  $f(x) > g(x)$  on the interval  $[a, b]$

$$\text{Area} = \int_a^b (f(x) - g(x)) \, dx$$

