Calculus I
Reference: The notation $F(x)]_a^b$

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2019

We often use the notation

$$F(x)]_a^b = F(b) - F(a)$$

or

$$[F(x)]_a^b = F(b) - F(a)$$

Therefore we can write

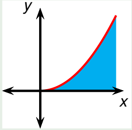
$$\int_a^b f(x)\mathrm{d}x = F(x)]_a^b$$

or

$$\int_a^b f(x)\mathrm{d}x = [F(x)]_a^b$$

Example

Find the area under the parabola $y = x^2$ from 0 to 1.



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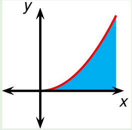

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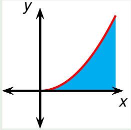

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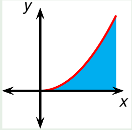

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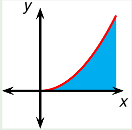

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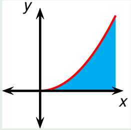

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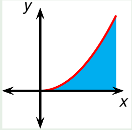

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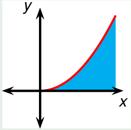

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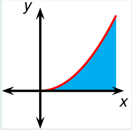

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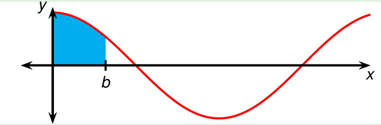

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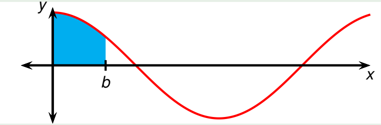

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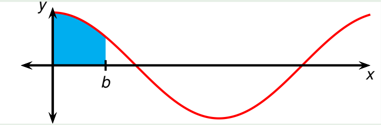

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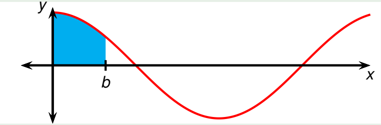

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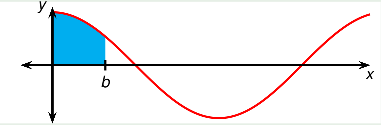

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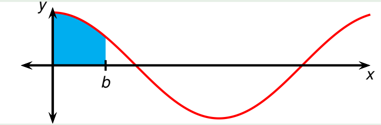

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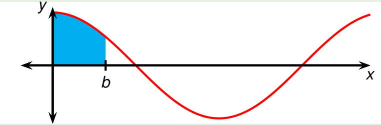

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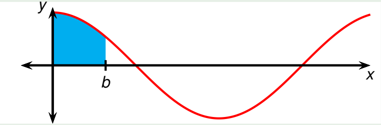

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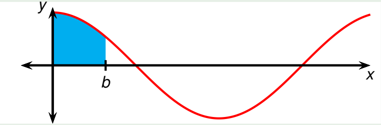

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