

Chapter 19

Applications of Integration



Fig. 19-1: Three possible orientations of a trapezium illustrated.

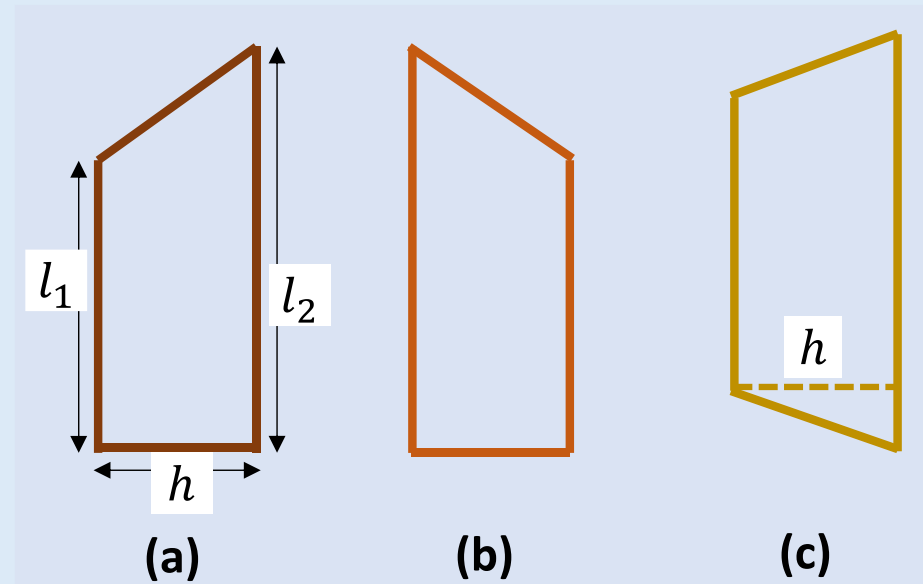
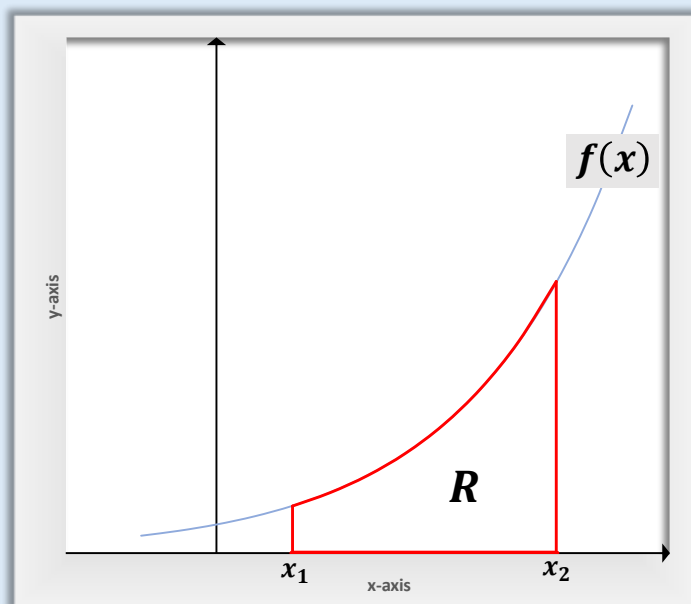
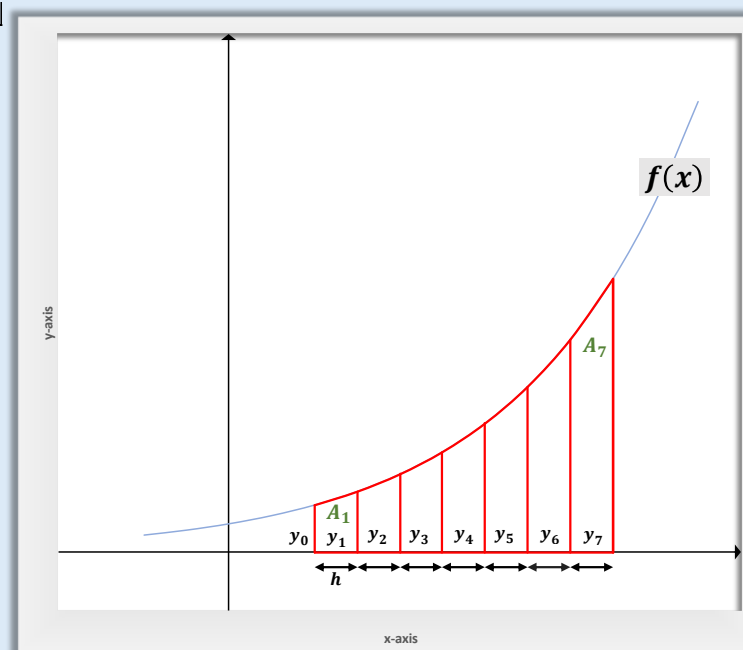


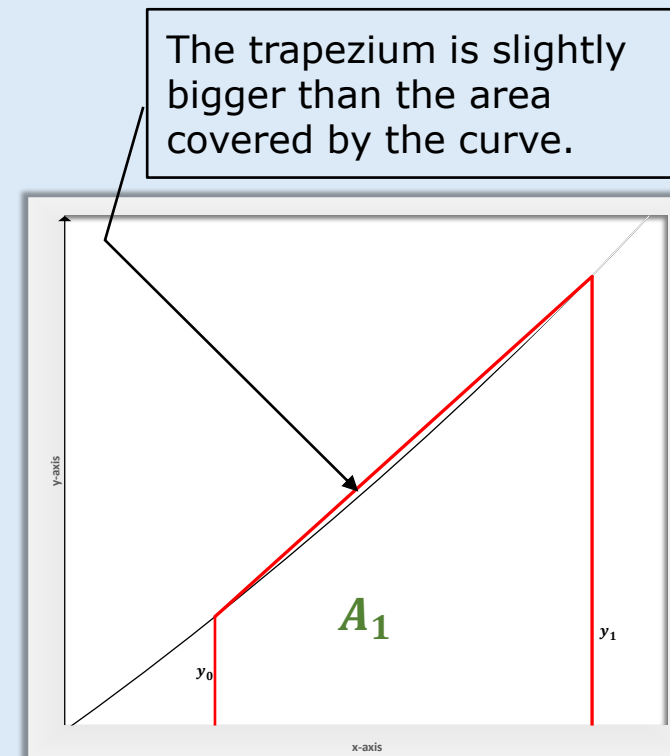
Fig. 19-2: Determining the area of equally spaced strips between the given limits illustrated.



(a)

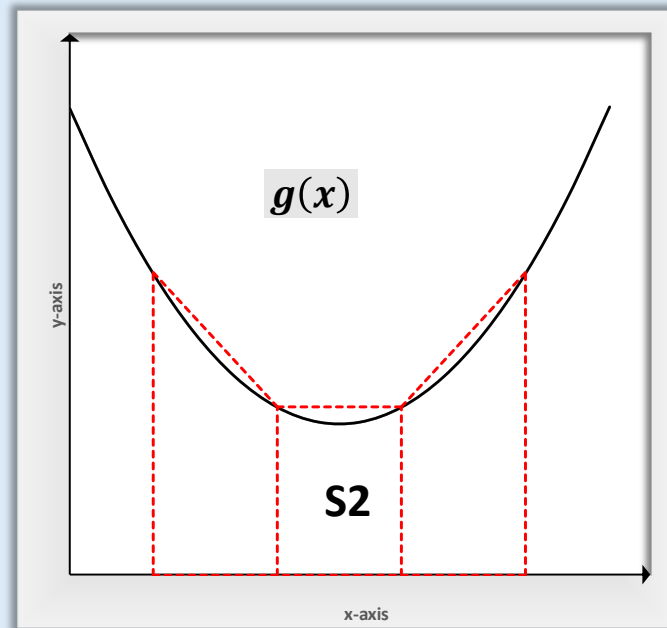


(b)

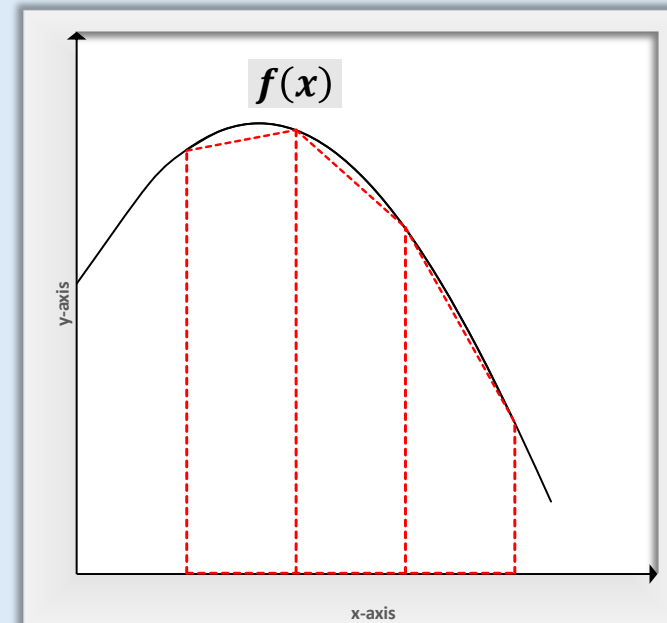


(c)

Fig. 19-3: Trapezium rule: (a) overestimation and (b) underestimation.



(a)



(b)

Fig. 19-4: Solution to Example 1(d).

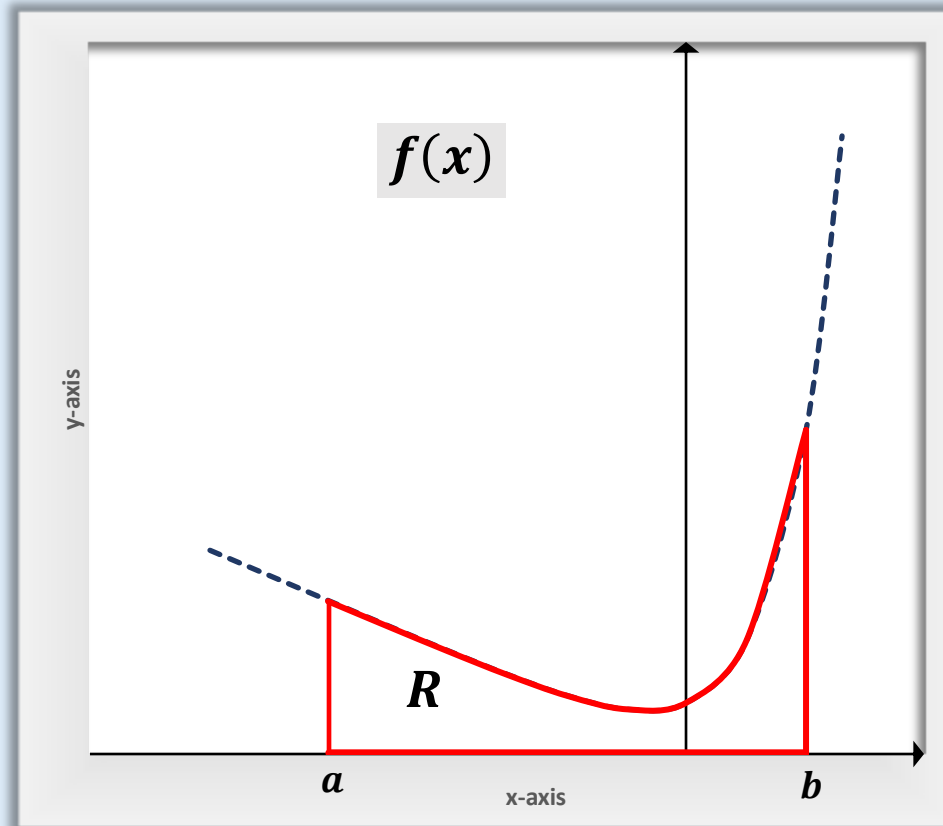


Fig. 19-5: Example 5.

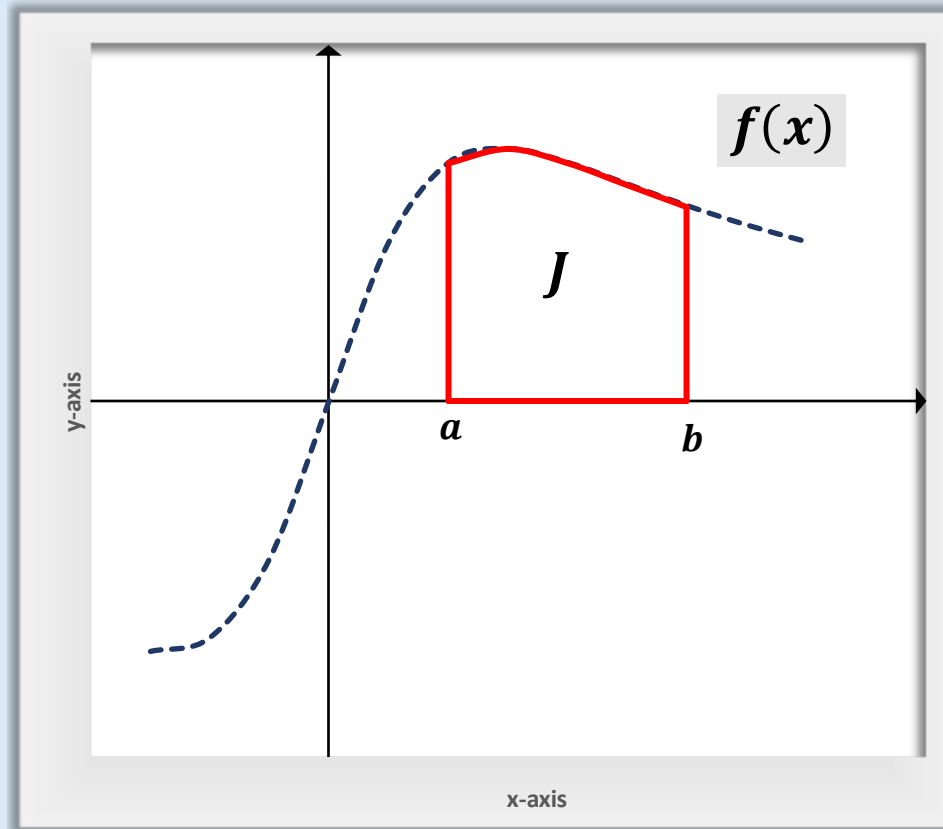


Fig. 19-6: Solution to Example 5(c) – Part II.

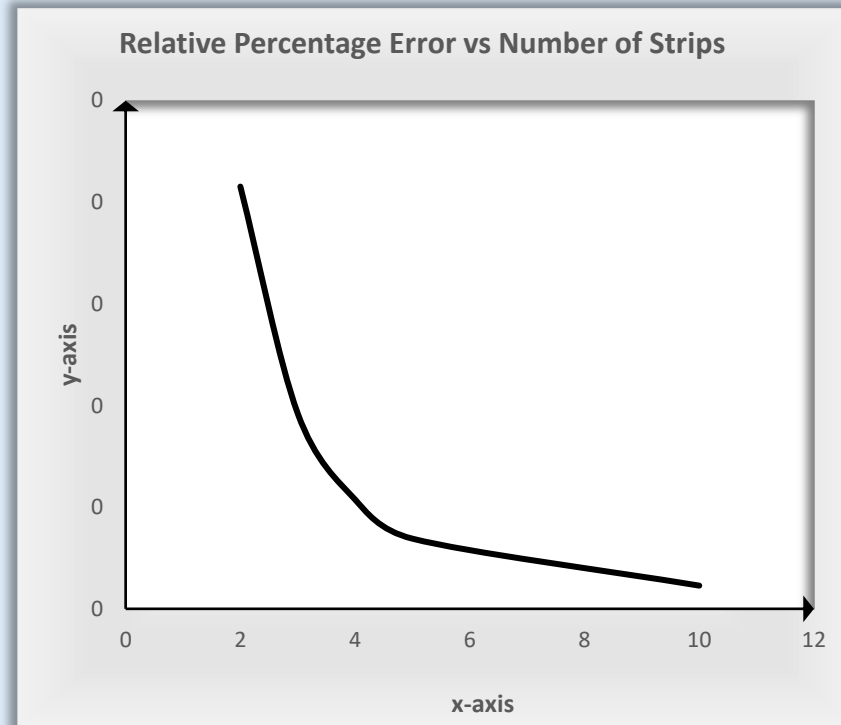


Fig. 19-7: Summation of the area of the strips under the curve.

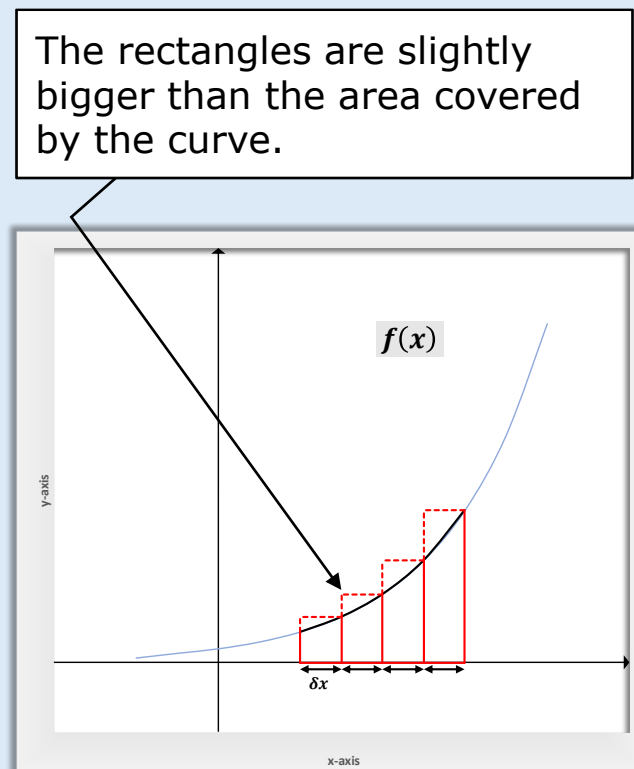


Fig. 19-8: Volume of solid of revolution illustrated.

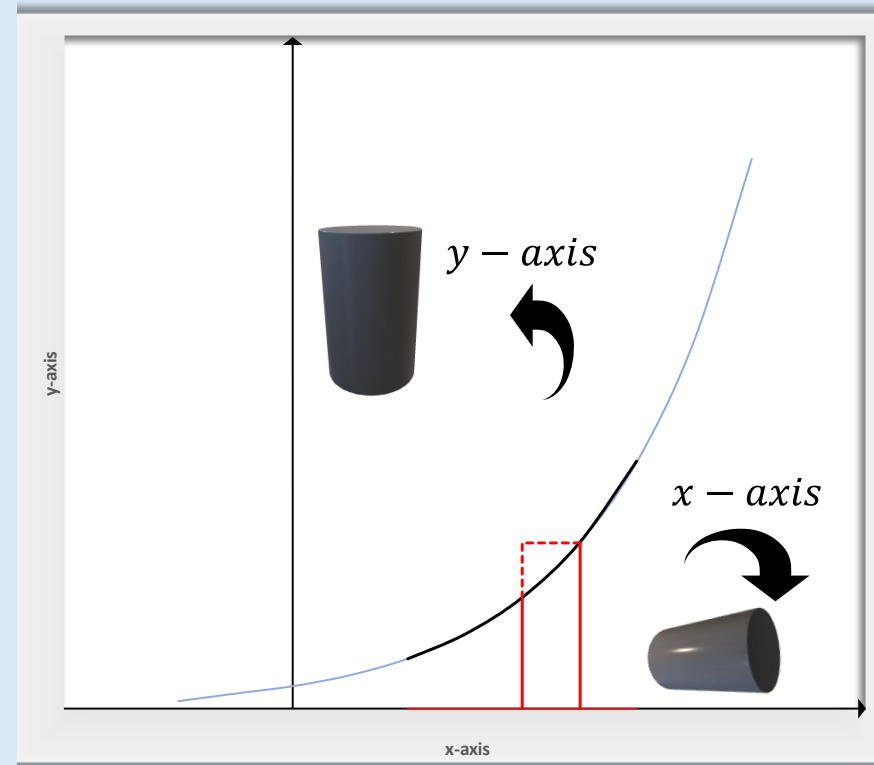


Fig. 19-9: Mean value of a function illustrated.

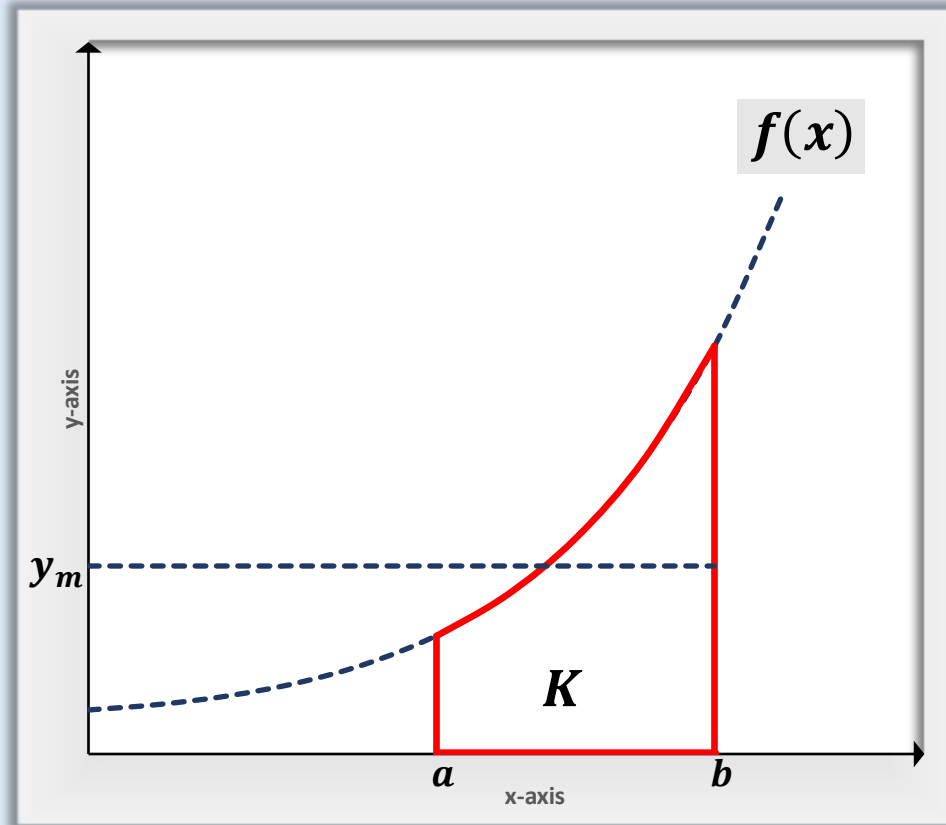
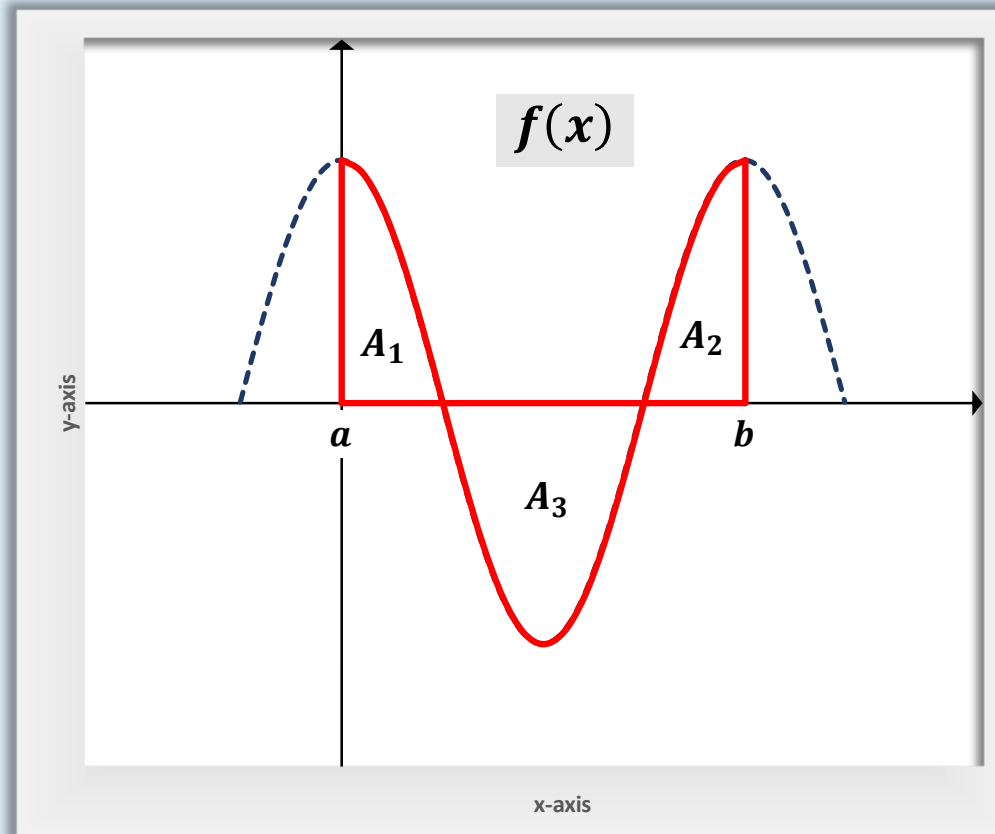


Fig. 19-10: Solution to Example 10(b).



Thank You

