

Checklist

What you should know

By the end of this subtopic you should be able to:

- find areas of regions bounded by the graph of $y = f(x)$ and the x -axis
 - be aware that if exact values are needed, parts of the region above and below the x -axis need to be dealt with separately
- find area of regions between the graph of two functions
 - be aware that several integrals might be needed in case the graphs intersect
- find area of regions bounded by a curve and the y -axis
- find volume of solids of revolution about both the x and y -axis
- be aware that technology can also be used if approximate values of the definite integral are enough
 - be aware that in certain cases the tools we learn about are not enough to find exact values, so the use of technology is necessary.

