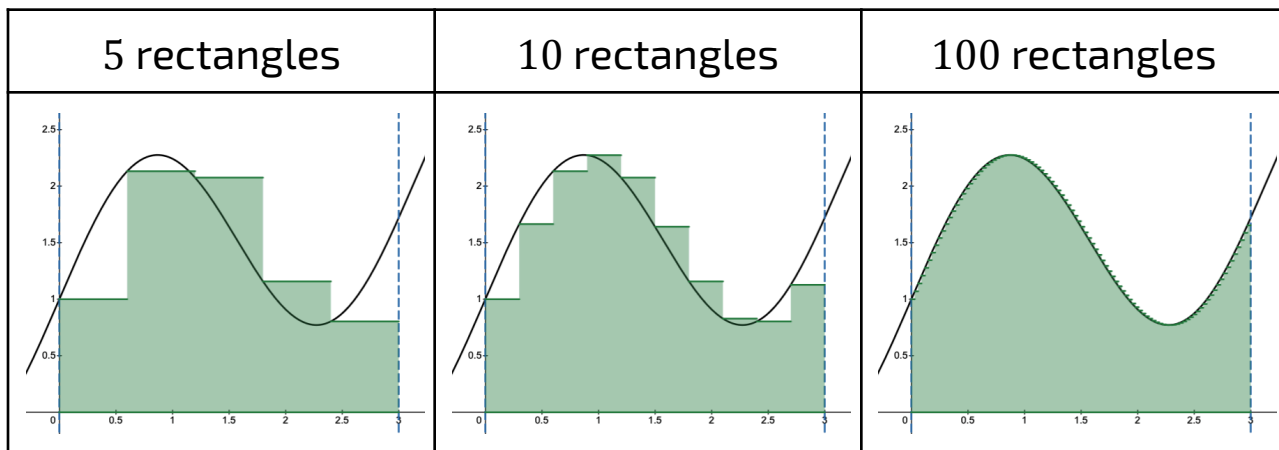# Calculus 2.4 Key Points

Improving Area Approximations:

Using a Riemann sum can be a good approximation for the area under a curve. To get the most precise answer possible, <u>increase the number of rectangles</u>.

5 rectangles	10 rectangles	100 rectangles

When only a few rectangles are used, the area under the curve yielded by using left, right, or midpoint rectangles can be somewhat different. However, as you increase the number of rectangles more and more, the option that you pick will matter less and less, since all three methods will approach the same area.