



## Practice – 1

---

Once you feel confident with the method of exhaustion, complete problem 1. Check your answers by going to the Solutions tab in Moodle.

**Instructions:** Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers.

1. Calculate the area bounded by the curve  $f(x) = x^2 + 2$  and the  $x$ -axis, between  $x = 1$  and  $x = 3$  by finding the limit of the sum of the areas of inscribed rectangles as the number of rectangles increases without bound.