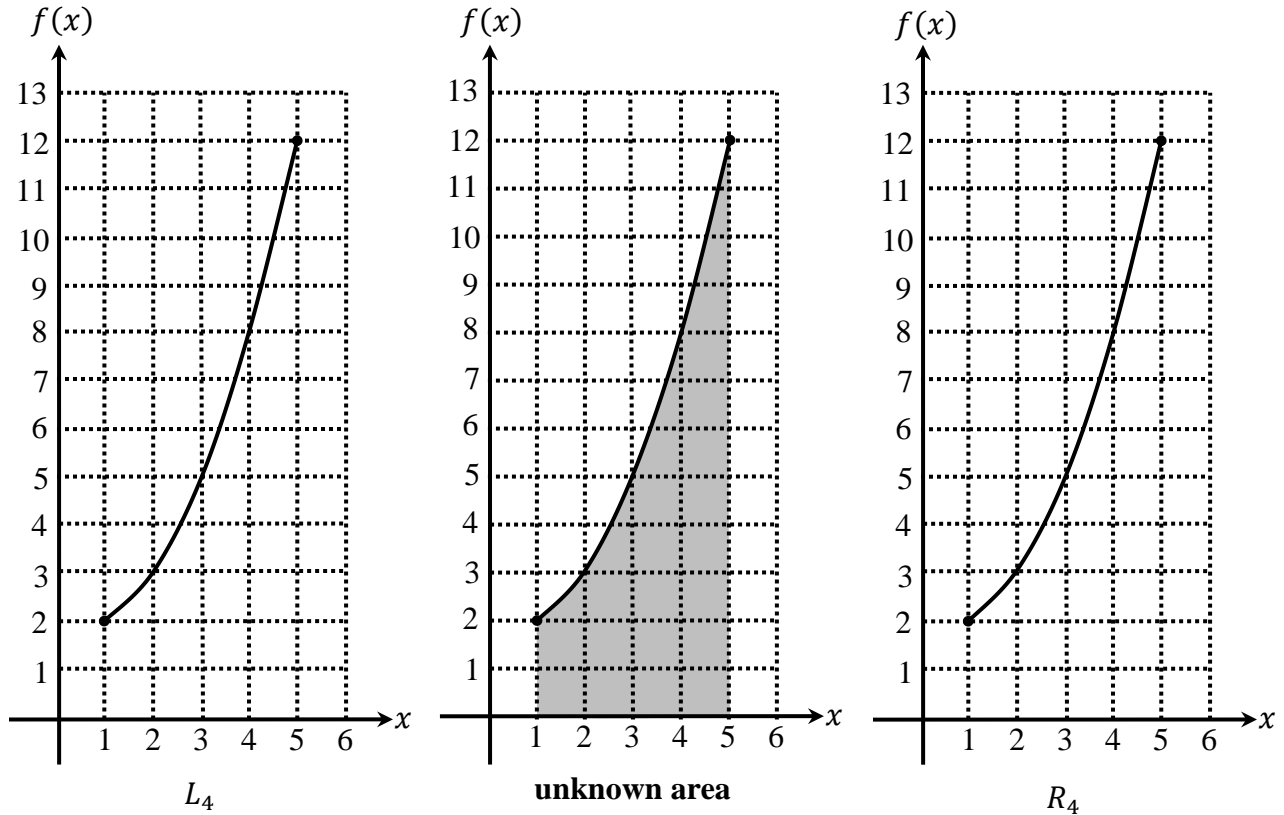


L	A	S	T		N	A	M	E	S				

F	I	R	S	T		N	A	M	E	S			

**MATH 2301 GW29: Estimating the Area Under a Graph by Using Riemann Sums**

The goal is to estimate the shaded area in the middle figure. You will do this by finding the values of the Riemann sums  $L_4$  and  $R_4$ . This will give you lower and upper bounds for the shaded area.



- (A) Draw in the rectangles for the left sum  $L_4$ .
- (B) Find the value of  $L_4$ .
- (C) Draw in the rectangles for the right sum  $R_4$ .
- (D) Find the value of  $R_4$ .
- (E) Use the values from questions (B) and (D) to build a true inequality

\_\_\_\_\_ < **unknown area** < \_\_\_\_\_