Calculus **Eighth Edition**

Larson/Hostetler/Edwards

4.2 Exercise 75 *(page 269)*

Consider the region bounded by the graphs of $f(x) = 8x/(x + 1)$, $x = 0$, $x = 4$, and $y = 0$, as shown in the figure. (a) Redraw the figure, and complete and shade the rectangles representing the lower sum when $n = 4$. Find this lower sum. (b) Redraw the figure, and complete and shade the rectangles representing the upper sum when $n = 4$. Find this upper sum. (c) Redraw the figure, and complete and shade the rectangles whose heights are determined by the functional values at the midpoint of each subinterval when $n = 4$. Find this sum using the Midpoint Rule.

(f)