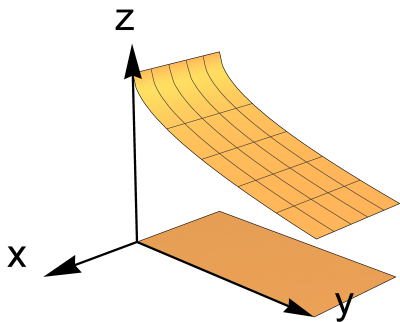


Double Integrals over Rectangles

Question

The figure shows the graph of $z = f(x, y) = 3 - \sqrt{y}$ over the region $\mathcal{R} = [-1, 0] \times [0, 3]$. Which is the best overestimate for the value of $\iint_{\mathcal{R}} f(x, y) dA$?



- A. 9
- B. -9
- C. 3
- D. $3(3 - \sqrt{3})$