## Double Integrals over Rectangles

## Question

The chart shows the depths of several locations in a $10 \mathrm{ft} \times 12 \mathrm{ft}$ rectangular pool. Which of these is the best estimate for the volume of water in the pool?

|  | 0 | 5 | 10 |
| :--- | :---: | :---: | :---: |
| 0 | 3 | 3 | 2 |
| 6 | 4 | 4 | 2 |
| 12 | 6 | 5 | 3 |

A. $240 \mathrm{ft}^{3}$
B. $330 \mathrm{ft}^{3}$
C. $450 \mathrm{ft}^{3}$
D. $570 \mathrm{ft}^{3}$
E. $720 \mathrm{ft}^{3}$

