

43. A tank is being filled with water at the rate of  $300\sqrt{t}$  gallons per hour with  $t > 0$  measured in hours. If the tank is originally empty, how many gallons of water are in the tank after 4 hours?
- (A) 600  
(B) 900  
(C) 1200  
(D) 1600  
(E) 2400

Answer

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44. The region in the first quadrant enclosed by the graphs  $y = x$  and  $y = 2 \sin x$  is revolved about the  $x$ -axis. The volume of the solid generated is
- (A) 1.895  
(B) 2.126  
(C) 5.811  
(D) 6.678  
(E) 13.355

Answer

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