

1990 - BC 2

2. Let  $R$  be the region in the  $xy$ -plane between the graphs of  $y = e^x$  and  $y = e^{-x}$  from  $x = 0$  to  $x = 2$ .

- (a) Find the volume of the solid generated when  $R$  is revolved about the  $x$ -axis.
- (b) Find the volume of the solid generated when  $R$  is revolved about the  $y$ -axis.