

- 3**      **(i)** Sketch the curve  $y = (x - 2)^2$ . [1]
- (ii)** The region enclosed by the curve, the  $x$ -axis and the  $y$ -axis is rotated through  $360^\circ$  about the  $x$ -axis. Find the volume obtained, giving your answer in terms of  $\pi$ . [4]