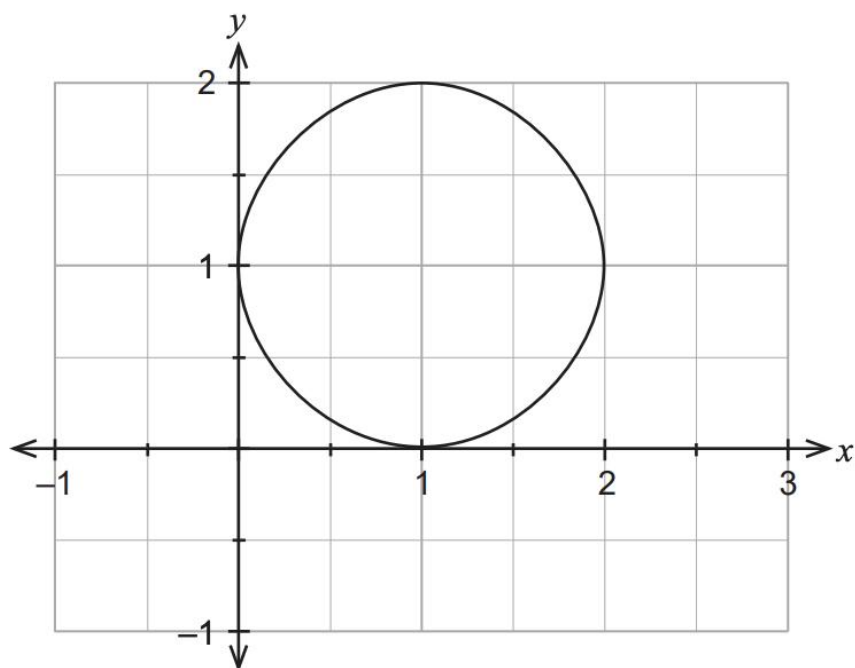


Question 16**(5 marks)**

The curve shown below is given by the equation $(y - 1)^2 = \sin\left(\frac{\pi x}{2}\right)$.



- (a) Calculate the area, correct to 0.0001 square units, of the region that forms the interior of this curve. (3 marks)

- (b) By using the answer to part (a), determine whether this curve is a circle. Explain your answer. (2 marks)