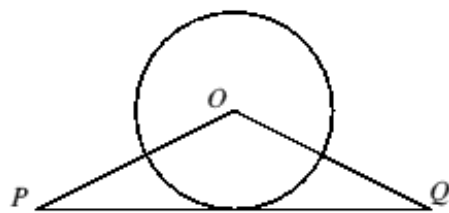




11. The diagram shows a circle with centre  $O$  and a triangle  $OPQ$ . Side  $PQ$  is a tangent to the circle. The area of the circle is equal to the area of the triangle. What is the ratio of the length of  $PQ$  to the circumference of the circle?



- A 1 : 1      B 2 : 3      C 2 :  $\pi$       D 3 : 2      E  $\pi$  : 2

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11. A Let the radius of the circle be  $r$ . Then its area is  $\pi r^2$ . The height of the triangle is  $r$  and its area is  $\frac{1}{2} \times PQ \times r$ . So  $\frac{1}{2} \times PQ \times r = \pi r^2$  and therefore  $PQ = 2\pi r$ , which is also the circumference of the circle. Therefore the ratio of the length of  $PQ$  to the circumference of the circle is 1 : 1.