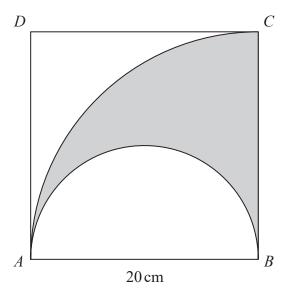
7 The diagram shows a square *ABCD* with sides of length 20 cm. It also shows a semicircle and an arc of a circle.





AB is the diameter of the semicircle. AC is an arc of a circle with centre B.

Show that
$$\frac{\text{area of shaded region}}{\text{area of square}} = \frac{\pi}{8}$$

(Total for Question 7 is 4 marks)