Weekly Challenge 5

The diagram shows a shaded semicircle of diameter 4, from which a smaller semicircle has been removed. The two semicircles touch at exactly three points.

What fraction of the larger semicircle is shaded?



- $\bigcirc \frac{2}{3}$
- $\bigcirc \frac{1}{2}$
- $\bigcirc \frac{\sqrt{2}}{3}$
- $\bigcirc \frac{\sqrt{2}}{2}$
- $\bigcirc \frac{3}{4\pi}$

Don't forget to watch the video solution here on YouTube.