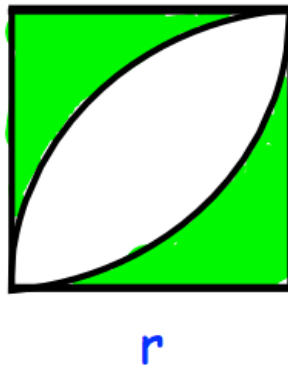In the figure, the arcs are quadrants of a circle.

Calculate the shaded area.

r

Each shaded area is

the area of the square – area of the quarter circle

$= r^2 - \frac{1}{4}\pi r^2$

$$\therefore \textbf{area} = \textbf{2r}^2 - \textbf{½ } \boldsymbol{\pi}\textbf{r}^2$$