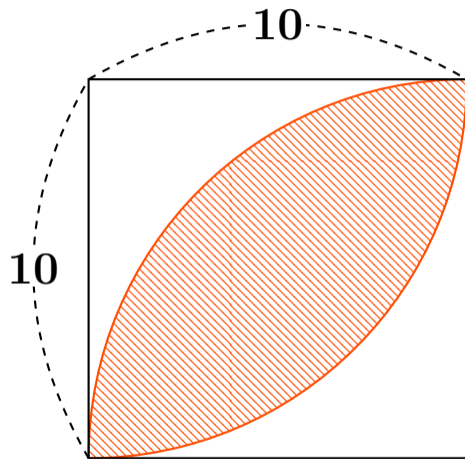
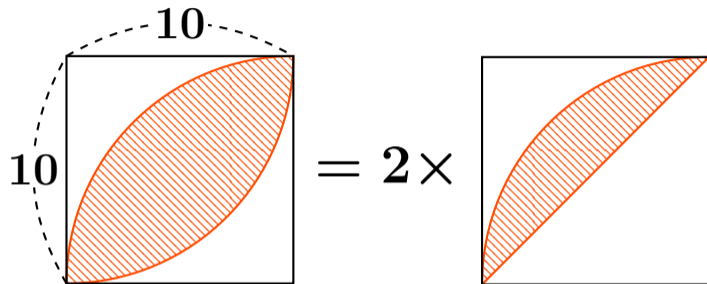


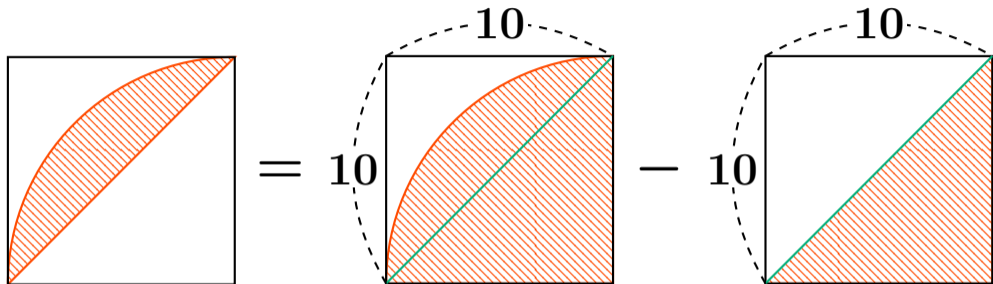
面積を求めなさい



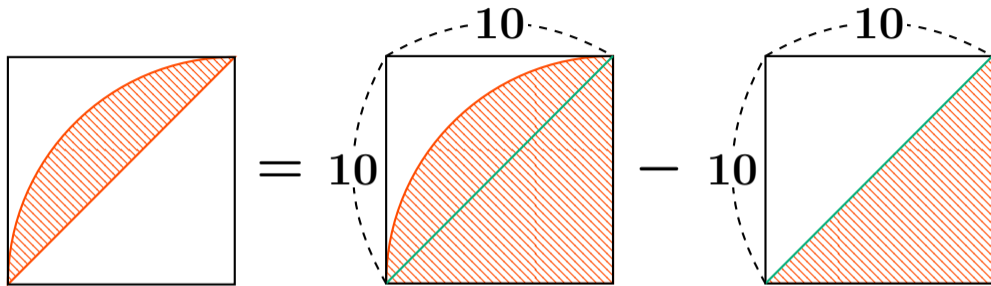
面積を求めなさい



面積を求めなさい



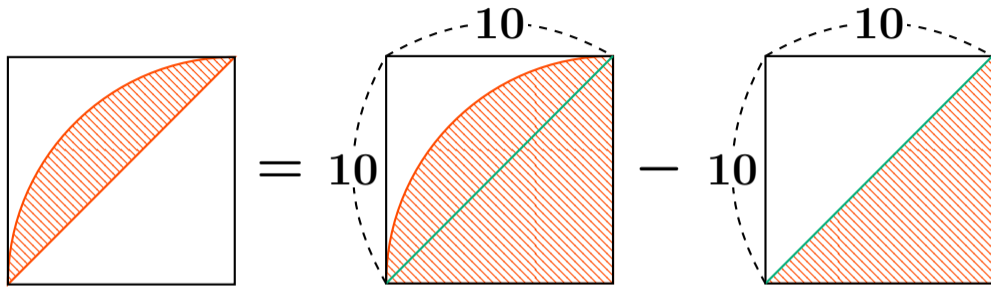
面積を求めなさい



The diagram illustrates the calculation of the area of a quarter-circle sector in a square with side length 10. The area is found by subtracting the area of a right-angled triangle from the area of a quarter-circle sector.

$$= \frac{\pi \times 10^2}{4} - \frac{10 \times 10}{2}$$

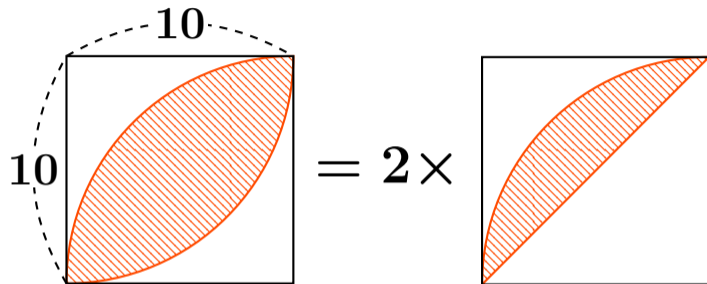
面積を求めなさい



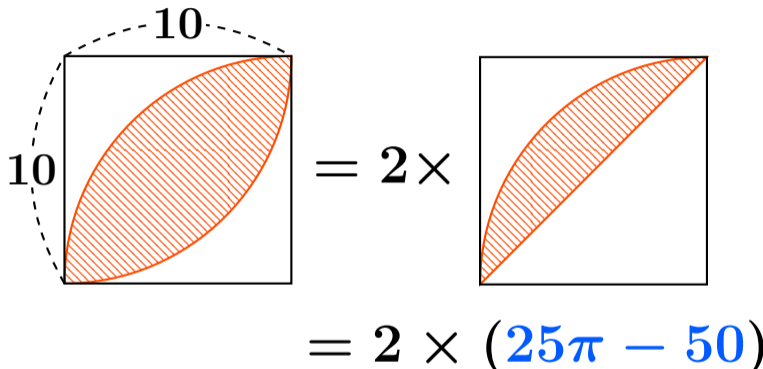
The diagram illustrates the calculation of the area of a quarter-circle sector in a square. The square has a side length of 10. The quarter-circle sector is shaded orange with diagonal lines. The area is calculated as the area of the quarter-circle minus the area of the right-angled triangle formed by the diagonal.

$$\begin{aligned} &= \frac{\pi \times 10^2}{4} - \frac{10 \times 10}{2} \\ &= 25\pi - 50 \end{aligned}$$

面積を求めなさい



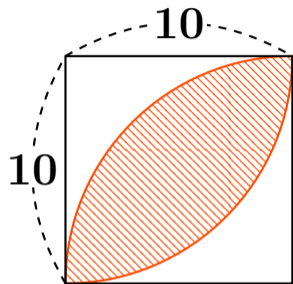
面積を求めなさい



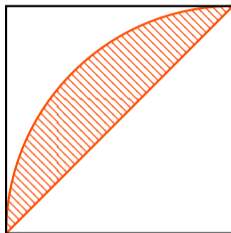
The diagram illustrates the calculation of the area of a lens-shaped region (shaded in orange) formed by two quarter-circles of radius 10 within a square of side length 10. The area is calculated as follows:

$$= 2 \times$$
$$= 2 \times (25\pi - 50)$$

面積を求めなさい



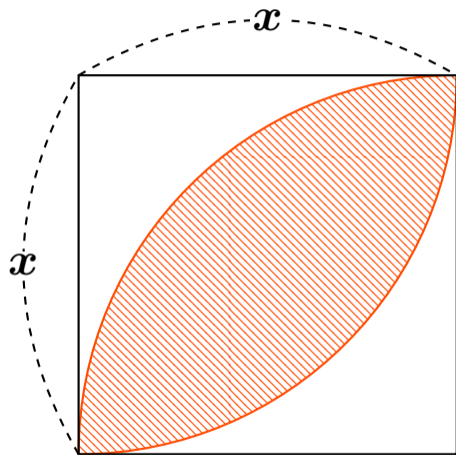
$$= 2 \times$$



$$= 2 \times (25\pi - 50)$$

$$= 50\pi - 100 \quad \boxed{\text{答}}$$

一般化すると下記のようになる



$$\frac{x^2}{2} \pi - x^2$$