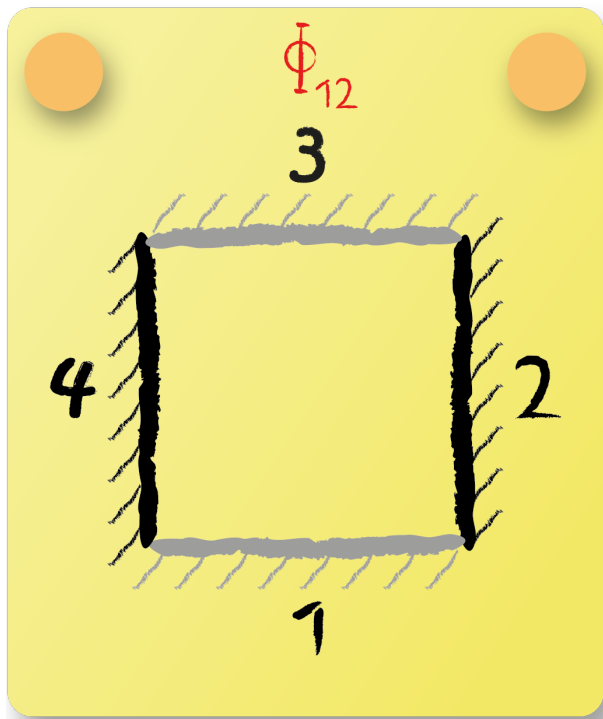


View Factor: Task 17



The image shows a square body.
What is ϕ_{12} ?

1



$$\phi_{12} = 1 - 1/\sqrt{2}$$

2



If we think of this square here as two equal right triangles with imaginary dashed diagonal line, the length that divided the square from edges is multiples of $\sqrt{2}$, and the radiation leaving this length hits to surface 1 and 4 equally that means it is $1/2$. Reciprocity and enclosure rule for right triangle can be applied.