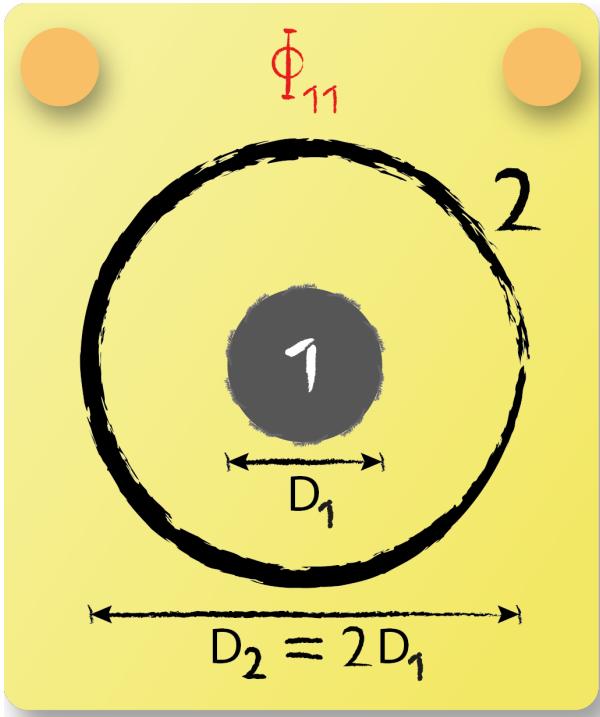


View Factor: Task 1



The image shows two circular bodies. The body 1 is completely inside of body 2. Diameter of body 1 is half of diameter of body 2. What is ϕ_{11} ?

1



$$\phi_{11} = 0$$

2



ϕ_{11} means what percentage of Body 1 sees Body 1 (itself). For a convex surface, no radiation can leave the surface and then hit later, because radiation travels in straight lines. Hence, for convex surfaces, ϕ_{11} is zero.