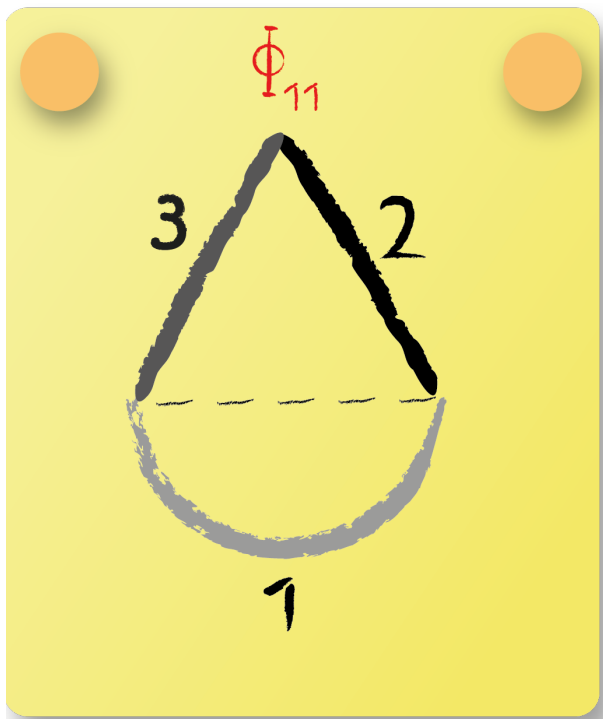


## View Factor: Task 21



The image shows a combination of a triangular and a hemisphere body. What is  $\phi_{11}$ ?

1



$$\phi_{11} = 1 - 2/\pi$$

2



As we know  $\phi_{H,1} = 1$ ,  $\phi_{H,H} = 0$  from hemisphere 1 to the plane indicated by the dashed line (H). Reciprocity rule can be applied for  $\phi_{1,H} = (A_H/A_1) \cdot (\phi_{H,1})$  and the result is  $\phi_{1,H} = 2/\phi$ . Now the enclosure rule is applied as  $\phi_{1,1} + \phi_{1,H} = 1$ .