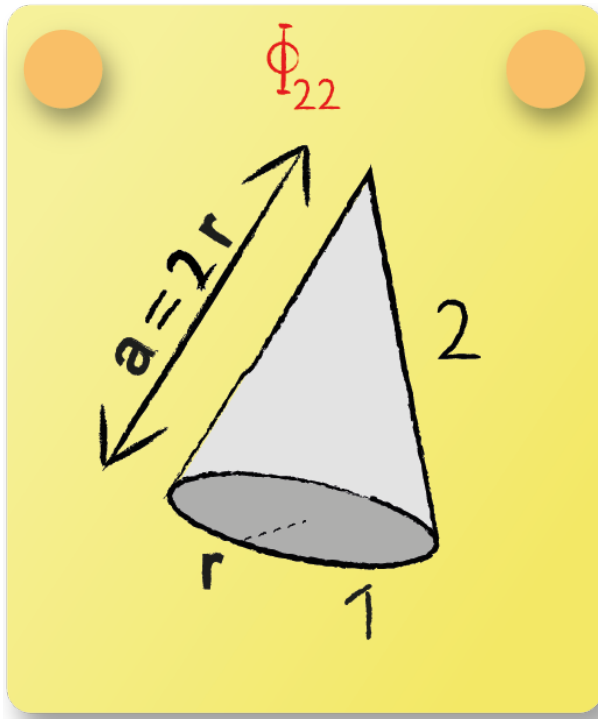# View Factor: Task 53

The image shows a cone, which side length a equals $2r$.

1

$\phi_{22} = \frac{1}{2}$

2

Surface 1 only sees surface 2, therefore Φ_{12} equals 1. Taken into account the reciprocity rule, including surfaces $A_1 = \pi r^2$ and $A_2 = \pi r a$, one obtains the view factor Φ_{21}. View factor Φ_{22} follows from sum rule for Φ_{21} and Φ_{22}.