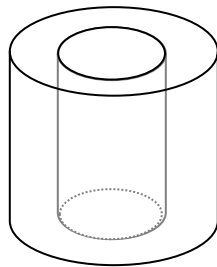

Example

Two concentric cylinders are nested together coaxially as shown in the figure. Assuming the surfaces are *diffuse*,

- calculate the fraction of radiation leaving the outer surface of the inner cylinder that goes through the top and bottom openings.
- Calculate the fraction of radiation leaving the outer surface of the inner cylinder that goes through just the top opening.
- Calculate the fraction of radiation leaving the inner surface of the outer cylinder that goes through the top and bottom openings.

$$D_{outer} = 10 \text{ cm}$$



$$L = 2.5 \text{ cm}$$

$$D_{inner} = 6 \text{ cm}$$