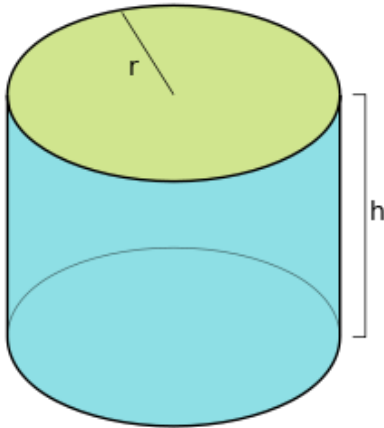


The cylinder has a height of 1.2m, radius 0.4m and is open at the top. The inside surface is painted at a cost of \$2.30 per m<sup>2</sup>. Calculate the cost of painting the inside surface.

Write a surface area of cylinder:



$$A = 2\pi r^2 + 2\pi rh = 2\pi r(r + h).$$

Write formula without top:

$$A = \pi r^2 + 2\pi rh$$

$$\pi \cdot 0.4^2 + 2\pi \cdot 0.4 \cdot 1.2 = 3.519$$

Calculate cost of painting:

$$\text{Cost} = 2.3 \cdot 3.519 = 8.09\$$$

Answer: 8\$ 9c.