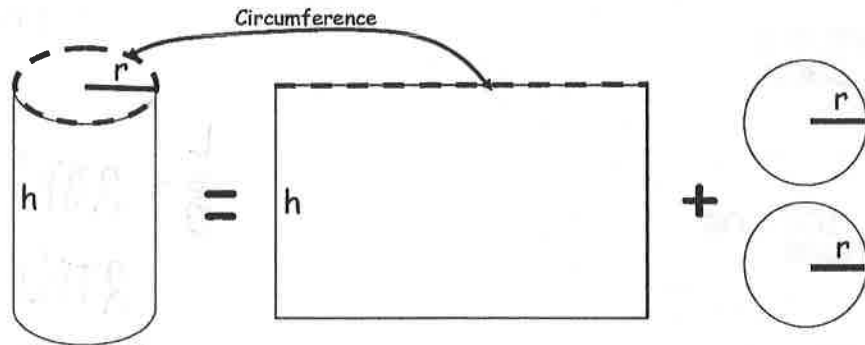


lateral surface area area covering face, not base

total surface area lateral area with bases added



Step 1:
name the shape

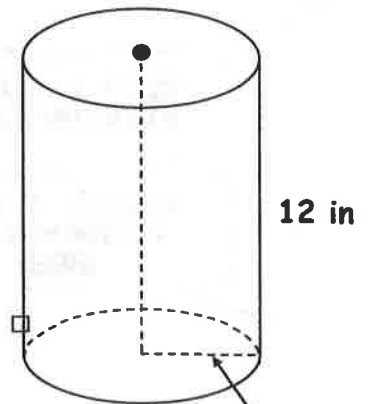
Step 2: SHADE &
name the base

Step 3: total OR
lateral

Step 4: CHOOSE
YOUR FORMULA
(write it in symbols)

Step 5: PLUG
in numbers

Step 6: solve,
answer with
label



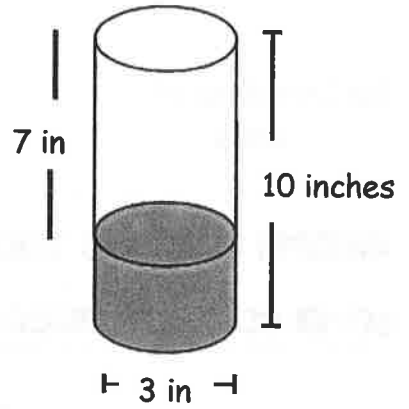
$$S = \underbrace{2\pi r h}_{\text{circumference}} + \underbrace{2\pi r^2}_{\text{area of base}}$$

height 4 in
↑ of cylinder

$$S = 2\pi(4)(12) + 2\pi(4^2)$$

$$= 402.12 \text{ in}^2$$

Sarah is trying to determine a new size for the chip can. The original can is shown below. How much cardboard would be needed if she changed the size to the gray portion of the can?



step 1:
name the shape

step 2: SHADE &
name the base

step 3: total OR
lateral

step 4: CHOOSE
YOUR FORMULA
(write it in symbols)

step 5: PLUG
in numbers

step 6: solve,
answer with
label

$$L = 2\pi r h$$

$$= 2\pi(1.5)(3)$$

$$= 28.27 \text{ in}^2$$

(faint handwritten notes)

$$(2\pi)(3)(7) + (2\pi)(3)^2 = 2$$

$$2\pi(21) + 2\pi(9) = 2$$

$$42\pi + 18\pi = 2$$

$$60\pi = 2$$

$$\pi = \frac{2}{60}$$

$$\pi = \frac{1}{30}$$