**SURFACE AREA - Lateral Area**: Area of the sides, excluding bases

Total Area: Area of all surface; sides and bases

CUBE   ($A_L = 4s^2$ ⭐)   ($A_T = 6s^2$ ⭐)

3cm
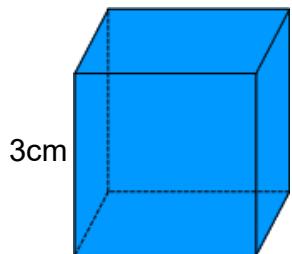
$A_L = 4(3)^2 = 4(9) = 36\ cm^2$

$A_T = 6(3)^2 = 6(9) = 54\ cm^2$

PRISM

Lateral Area   ($A_L = P_b \times H$ ⭐)   Total Area   ($A_T = 2A_b + A_L$ ⭐)

2cm

4cm

3cm
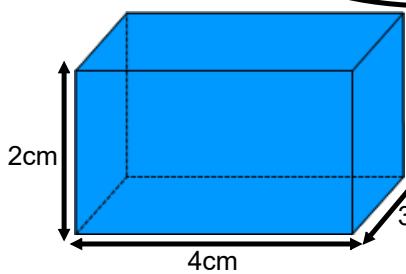
$A_L = 14(2)$
$= 28\ cm^2$

$A_T = 2(12) + 28$
$= 24 + 28$
$= 52\ cm^2$

$P_b = 2(4) + 2(3) = 8 + 6 = 14$

$A_b = 4(3) = 12$

a cm
3 in

b cm
4 in

c

cm
2 in

5 cm
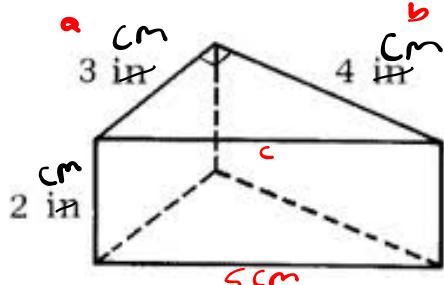
$a^2 + b^2 = c^2$
$3^2 + 4^2 = c^2$
$9 + 16 = c^2$
$\sqrt{25} = \sqrt{c^2}$
$5 = c$

$A_L = P_b \cdot h$
$\quad = (3+4+5)(2)$
$\quad = 12(2)$
$\quad = 24\ cm^2$

$A_T = 2A_b + A_L$
$\quad = 2(3)(4) + 24$
$\quad = 2(12) + 24$
$\quad = 24 + 24$
$\quad = 48\ cm^2$