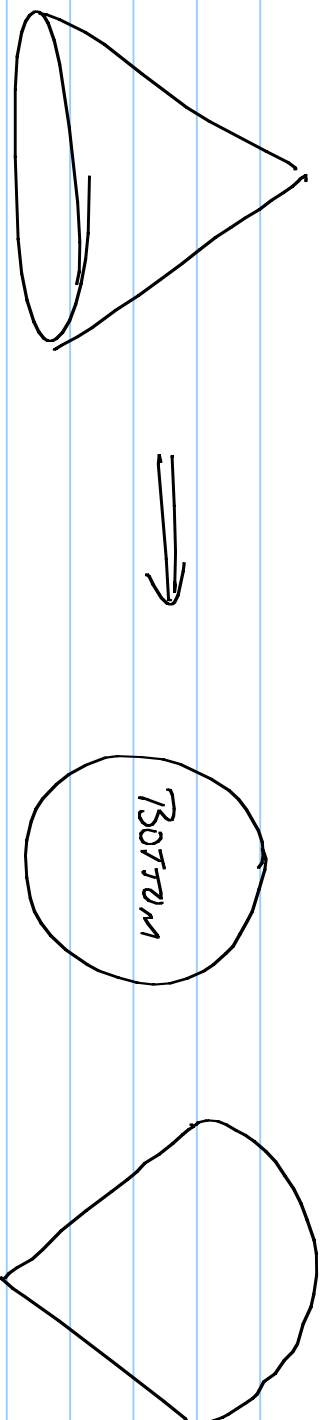


SURFACE AREA

- TO CALCULATE SURFACE AREA, DRAW A "NET"
(SHAPE OF OBJECT OPENED UP) AND CALCULATE
THE AREA OF EACH PIECE.

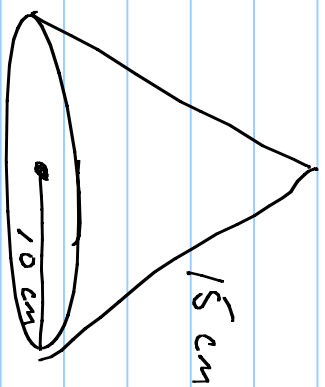
* YOU CAN USE FORMULAS *

- SURFACE AREA OF A CONE



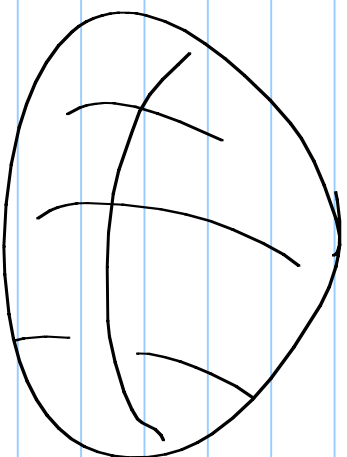
THE FORMULA : $\underbrace{\pi r^2}_{\text{BOTTOM}} + \underbrace{\pi r s}_{\text{LATERAL AREA}}$ $r = \text{RADIUS}$
 $S = \text{SLANT HEIGHT}$

EX



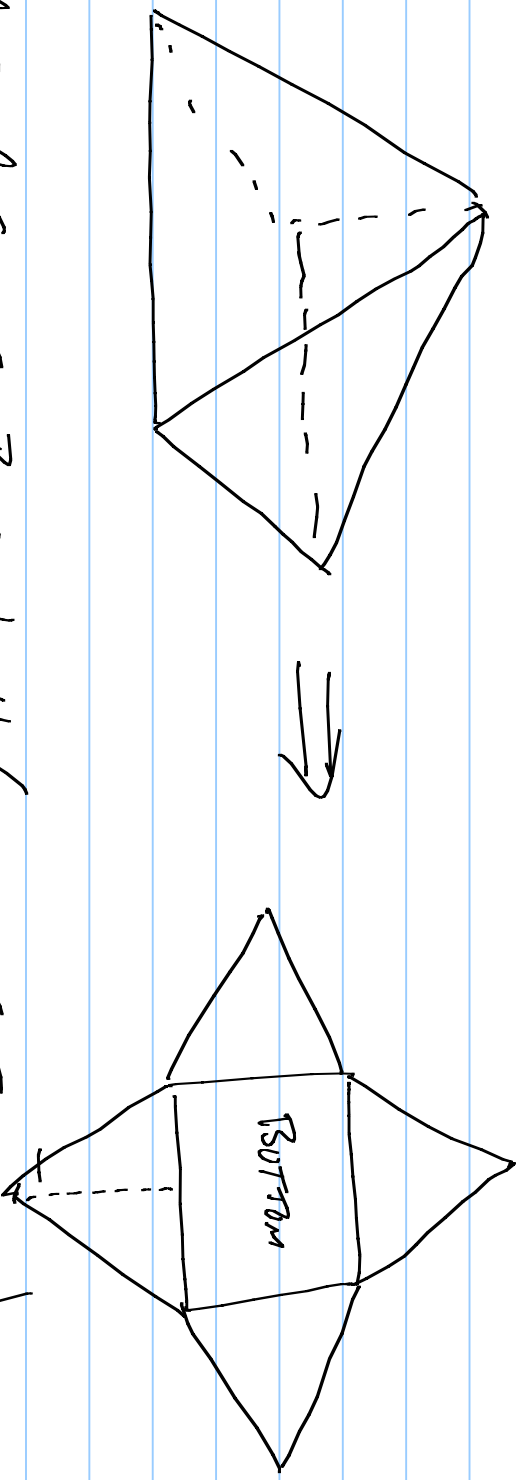
$$\pi (10)^2 + \pi (10)(15) = 785.40 \text{ cm}^2$$

SURFACE AREA OF A SPHERE (BALL)



$$SA = 4\pi r^2$$

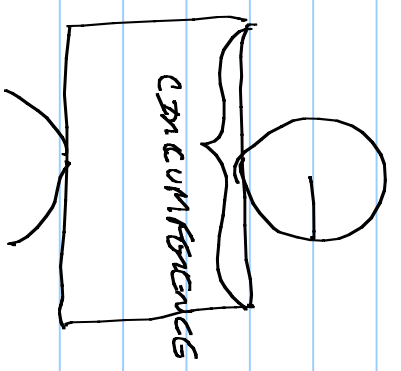
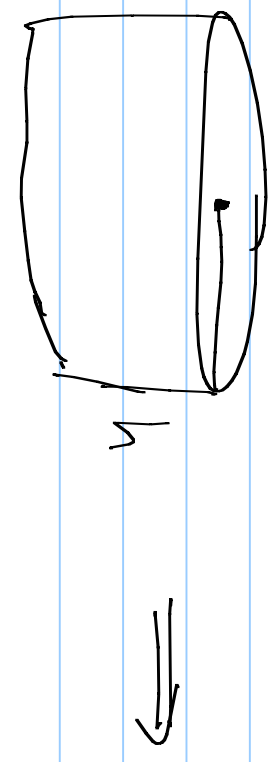
SURFACE AREA OF A RIGHT PYRAMID



$$S.A. = \text{AREA OF BASE} + 4 (\text{AREA OF TRIANGLE})$$

$$\frac{1}{2} s h$$

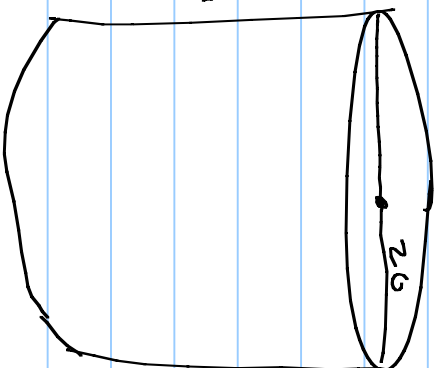
SURFACE AREA OF A CYLINDER



$$S.A. = 2\pi r^2 + 2\pi r h$$



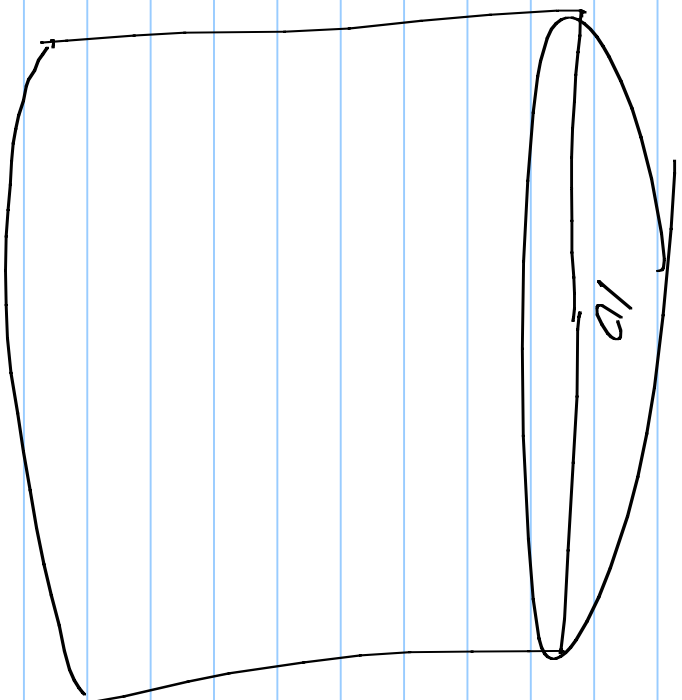
DE



$$S.A. = 2\pi(10)^2 + 2\pi(10)(50)$$

$$S.A. = 3769.91 \text{ cm}^2$$

IF



FIND THE HEIGHT OF

THE CYLINDER IF S.A. = 691.15 cm

$$S.A. = 2\pi r^2 + 2\pi r h$$

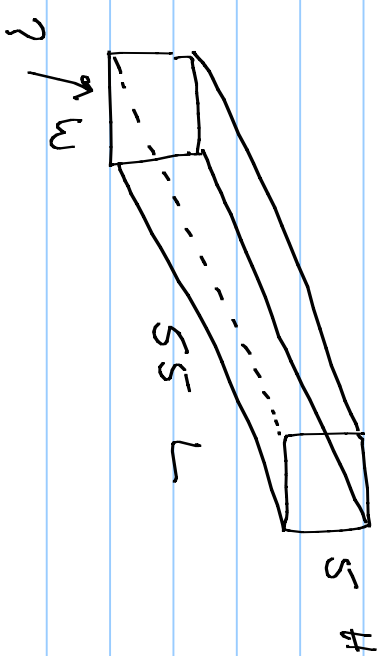
$$691.15 = 2(3.14)\left[\frac{10}{2}\right]^2 + 2(3.14)\left[\frac{10}{2}\right]h$$

$$691.15 = 157 + 31.4h$$
$$-157 \quad -157$$

$$\frac{534.15}{31.4} = \frac{31.4h}{31.4}$$

$$17 \text{ cm} = h$$

DE



$$SA = 5350 \text{ m}^2$$

$$S.A. = 2(L \times w) + 2(L \times H) + 2(w \times H)$$

$$5350 = 2(55 \times w) + 2(55 \times 5) + 2(w \times 5)$$

$$5350 = 2(55w) + 2(275) + 2(5w)$$

$$5350 = 110w + 550 + 10w$$

$$-550$$

$$\frac{4500}{120} = \frac{120w}{120}$$

$$40 = w$$

At 40, the 74th, 4th, 1-5, 14