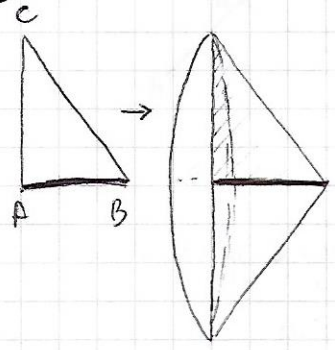
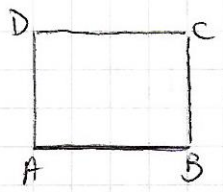


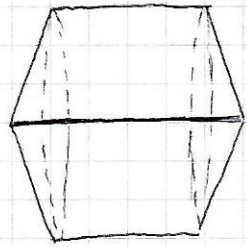
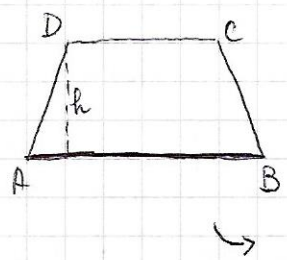
7



OTTENGO UN CONO



OTTENGO UN CILINDRO



OTTENGO UN SOLIDO A SUPERFICIE CURVA COMPOSTO DA UN CILINDRO E DA DUE CONI EQUIVALENTI

8) CILINDRO  $h = 10 \text{ cm}$   
 $r = 8 \text{ cm}$

$$S_{lat} = 2r\pi \cdot h = 2 \cdot 8 \cdot 10 \cdot \pi = 160\pi \text{ cm}^2$$

$$S_{tot} = S_{lat} + 2 \cdot A_{base} = 160\pi + 2 \cdot r^2\pi = 160\pi + 2 \cdot 8^2\pi = 160\pi + 2 \cdot 64\pi = (160 + 128)\pi = 288\pi \text{ cm}^2$$

$$V = r^2\pi \cdot h = 8^2 \cdot 10 \cdot \pi = 64 \cdot 10 \cdot \pi = 640\pi \text{ cm}^3$$

9) (CILINDRO EQUILATERO)

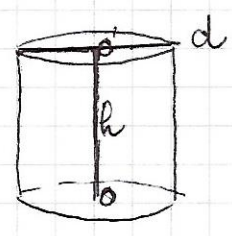
DATI

$$R = d = 24 \text{ cm}$$

CHIEDUTA

$$S_{tot} = ? \quad 2r\pi \cdot h + 2 \cdot r^2\pi$$

$$V = ? \quad \rightarrow r^2 \cdot \pi \cdot h$$



SVOLGIMENTO

$$24 : 2 = 12 \text{ cm } r$$

$$V = 12^2 \cdot 24 \cdot \pi = 3456\pi \text{ cm}^3$$

$$S_{tot} = 2 \cdot r \cdot \pi \cdot h + 2 \cdot r^2\pi = 24 \cdot 24 \cdot \pi + 2 \cdot 144 \cdot \pi = (576 + 288)\pi = 864\pi \text{ cm}^2$$

10

DATI

$$A_{base} \text{ cilindro} = 16\pi \text{ cm}^2$$

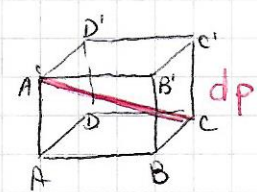
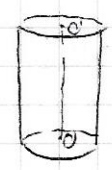
$h$  cilindro = diagonale parallelepipedo  $dp$

$$d_{1p} = 3 \text{ cm}; \quad d_{2p} = 4 \text{ cm}; \quad d_{3p} = 12 \text{ cm}$$

CHIEDUTA

$S_{tot}?$

$V?$



SVOLGIMENTO

$$\text{diagonale} \rightarrow d_{base p} = \sqrt{3^2 + 4^2} = \sqrt{9 + 16} = \sqrt{25} = 5 \text{ cm}$$

$$d_p = \sqrt{5^2 + 12^2} = \sqrt{25 + 144} = \sqrt{169} = 13 \text{ cm}$$

oppure  $d_p = \sqrt{d_1^2 + d_2^2 + d_3^2} = \sqrt{3^2 + 4^2 + 12^2} = \sqrt{9 + 16 + 144} = \sqrt{169} = 13 \text{ cm}$

$$r = \sqrt{\frac{A_{base}}{\pi}} = \sqrt{\frac{16\pi}{\pi}} = \sqrt{16} = 4 \text{ cm}$$

$$V = r^2 \cdot \pi \cdot h = 16\pi \cdot 13 = 208\pi \text{ cm}^3$$

$$S_{tot} = 2r\pi \cdot h + 2 \cdot A_{base} = 2 \cdot 4 \cdot 13 \cdot \pi + 2 \cdot 16\pi = 136\pi \text{ cm}^2$$