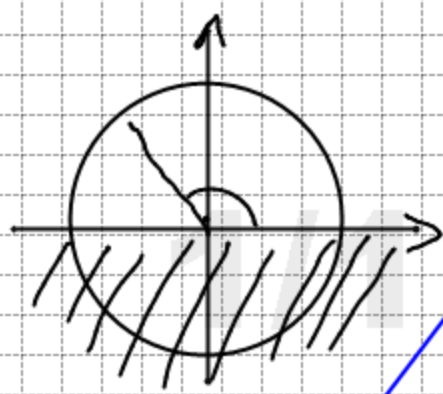


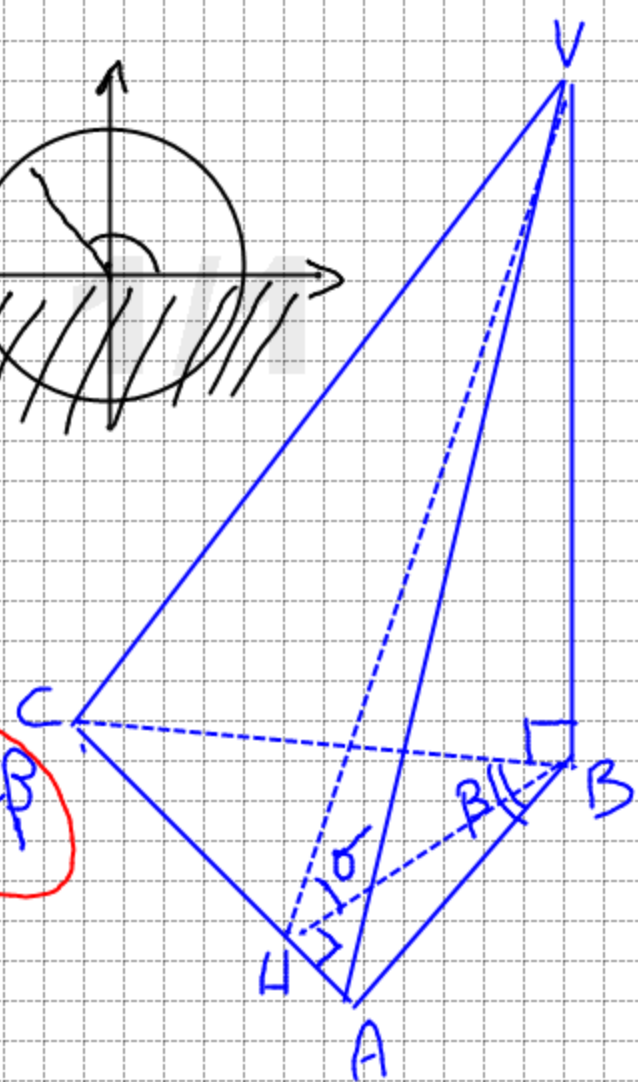
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$$AB=4 \quad BC=13 \quad AC=15$$

$BV \perp$ PIANO BASE $VB=32$



$$\overline{AC}^2 = \overline{BC}^2 + \overline{AB}^2 - 2\overline{BC}\overline{AB}\cos\beta$$



$$\cos\beta = \frac{\overline{BC}^2 + \overline{AB}^2 - \overline{AC}^2}{2\overline{BC}\overline{AB}} \Rightarrow \cos\beta = \frac{169 + 16 - 225}{104}$$

$$\cos\beta = \frac{-40}{104} = -\frac{5}{13} \quad \beta = 112^\circ 37' 17''$$

$$Q(ABC) = \frac{1}{2} \overline{AB}\overline{BC}\sin\beta \quad \sin\beta = \sqrt{1 - \frac{25}{169}}$$

$$Q = \frac{1}{2} \cdot 4 \cdot 13 \cdot \frac{12}{13} = 24$$

$$\sin\beta = \sqrt{\frac{169-25}{169}} = \frac{12}{13}$$

$$Q(ABC) = \frac{AC \cdot BH}{2} \Rightarrow BH = \frac{2Q}{AC} \quad BH = \frac{48}{15} = \frac{16}{5}$$

POICHÉ $H^A B V$ È UN TRIANGOLO RETTANGOLO

$$VB = HB \operatorname{tg} \sigma$$

$$\operatorname{tg} \sigma = \frac{VB}{HB}$$