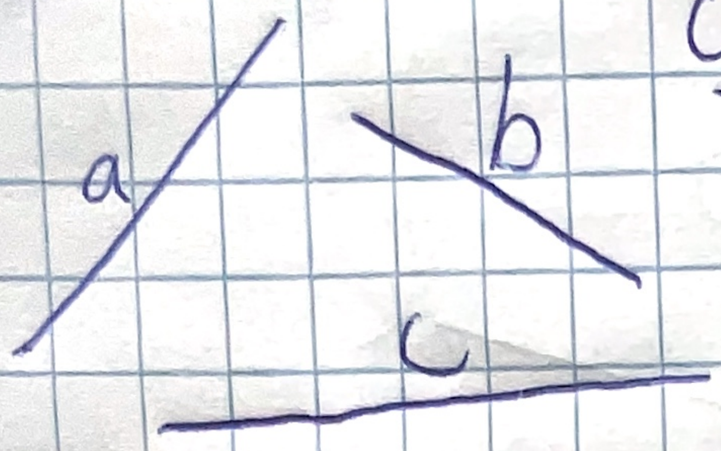
Is it a triangle?



Check: $\begin{cases} a+b>c \\ a+c>b \\ b+c>a \end{cases}$ (If you do not know which is the longest)

What kind of triangle?

Right $\rightarrow a^2+b^2=c^2$

Acute $\rightarrow a^2+b^2>c^2$

Obtuse $\rightarrow a^2+b^2<c^2$

PRISMS – Two parallel bases

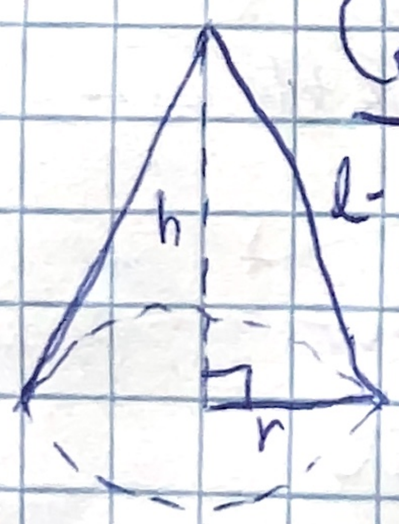
$V_{prism} = A_{base} \cdot height$

S.A. or T.A. $= 2 \cdot A_{base} + L.A.$ (total area)

Pyramids – One base

$$V_{pyramid} = \frac{A_{base} \cdot height}{3}$$

Cone



l – slant height

$$V_{cone} = \frac{\pi r^2 h}{3}$$

$L.A._{cone} = \pi r l$

$T.A._{cone} = \pi r^2 + \pi r l$

Sphere

$$V_{sphere} = \frac{4\pi r^3}{3}$$

$T.A._{sphere} = 4\pi r^2$