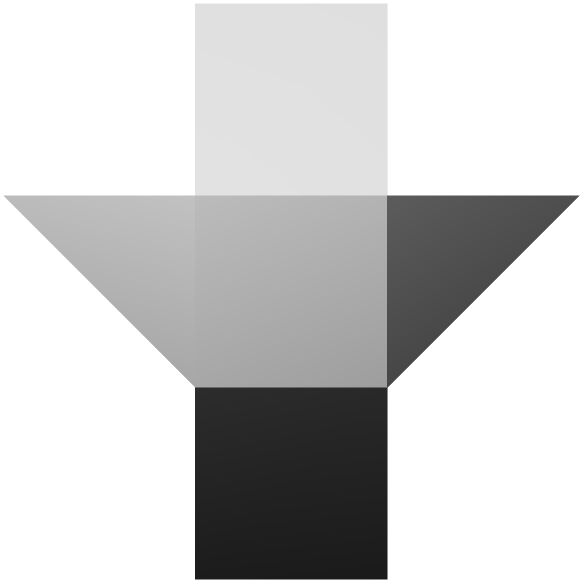
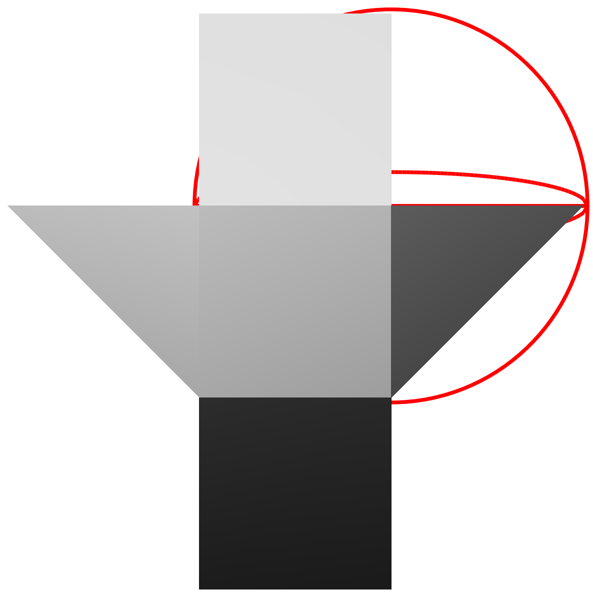
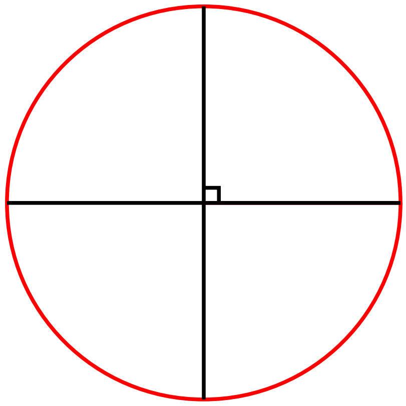
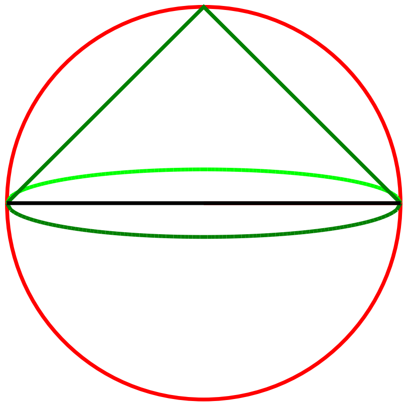
Archimedes's method

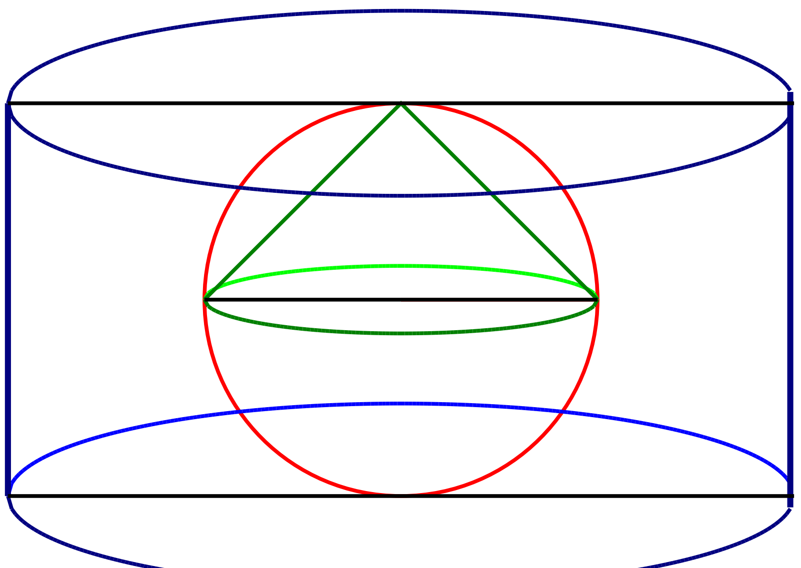
Theorem 1

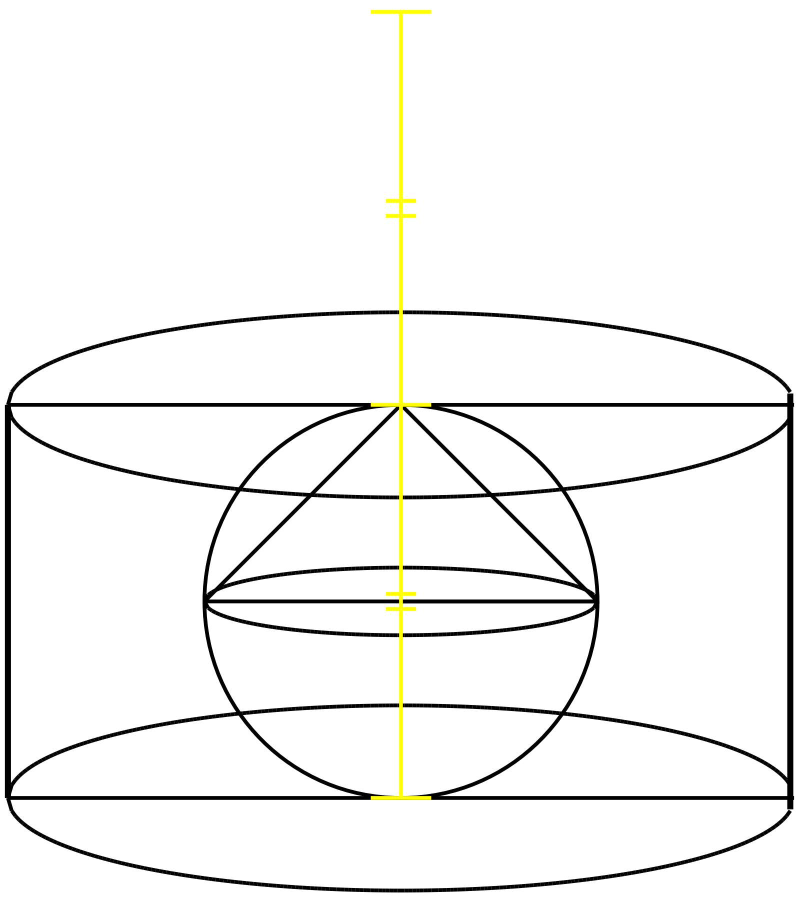


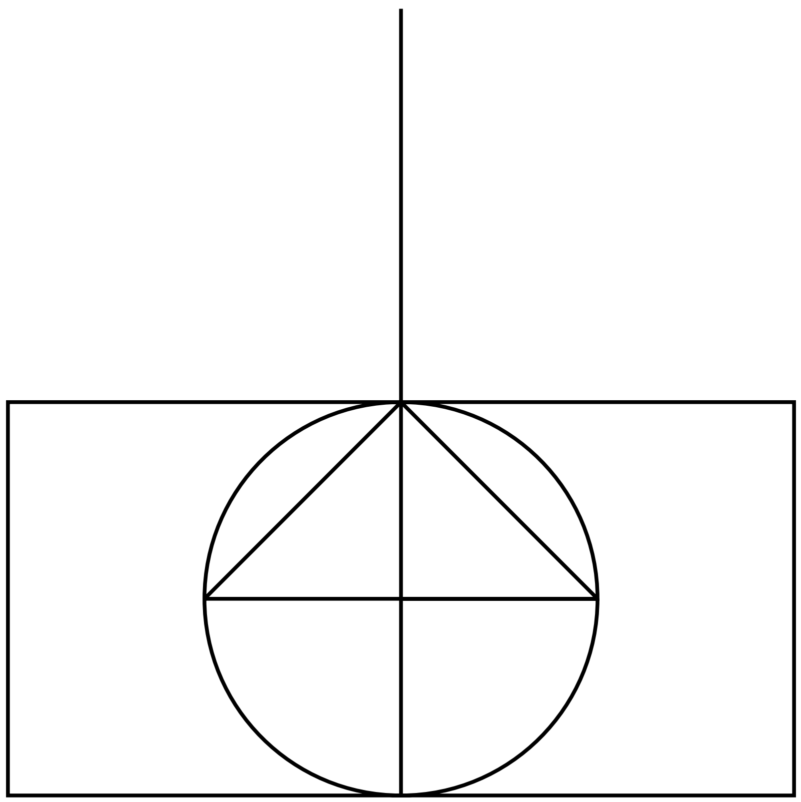


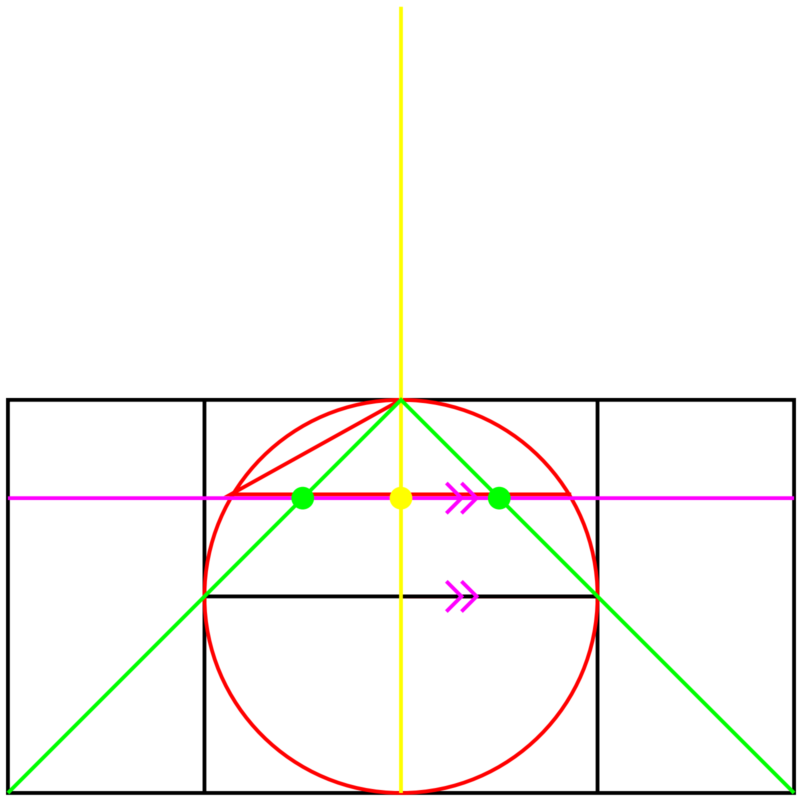


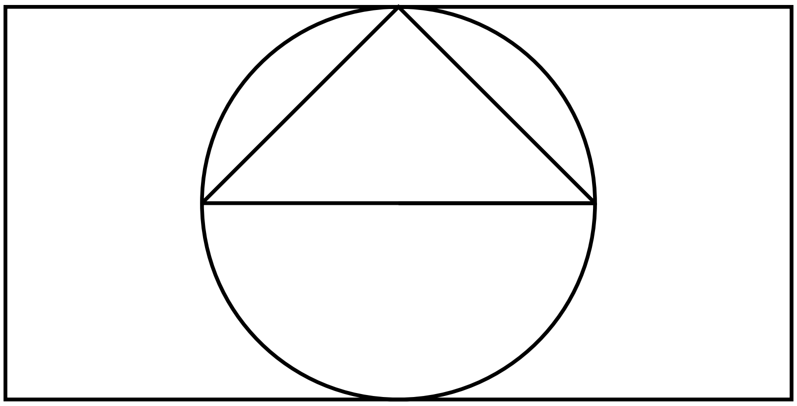


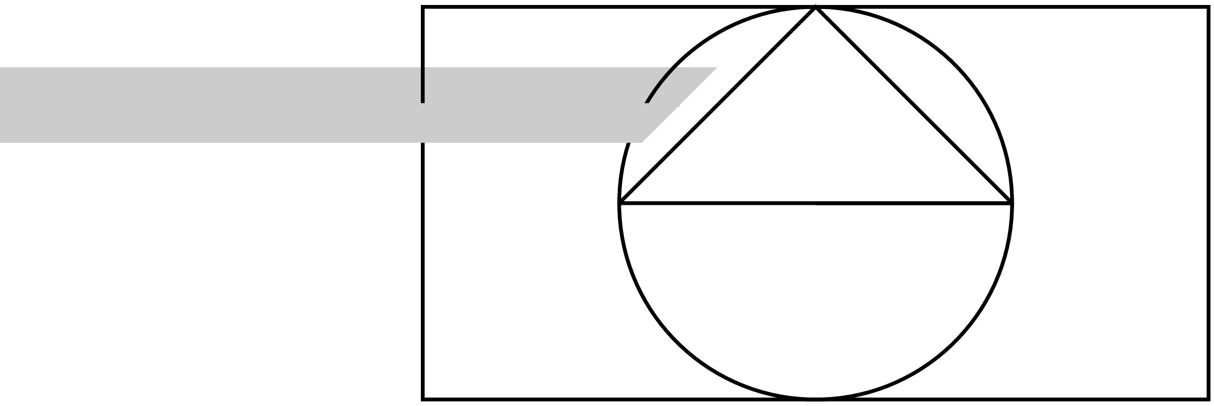


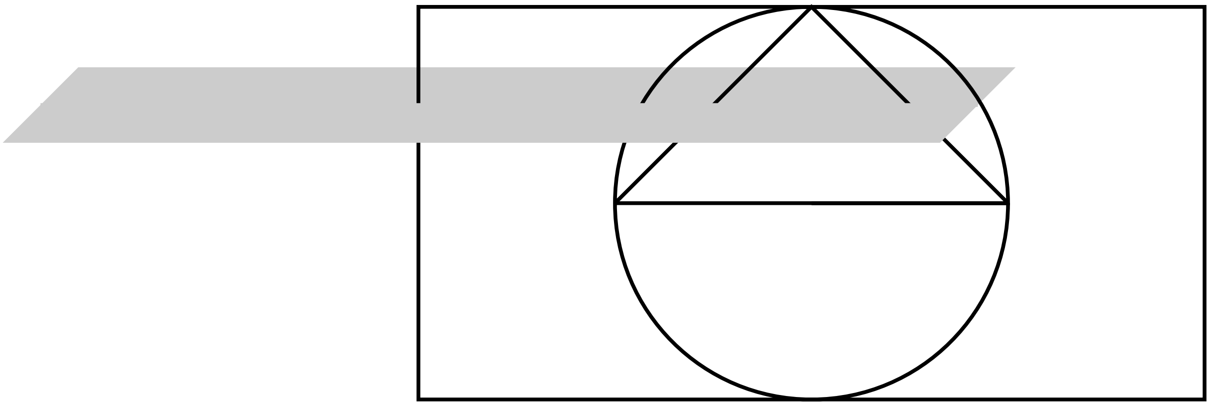


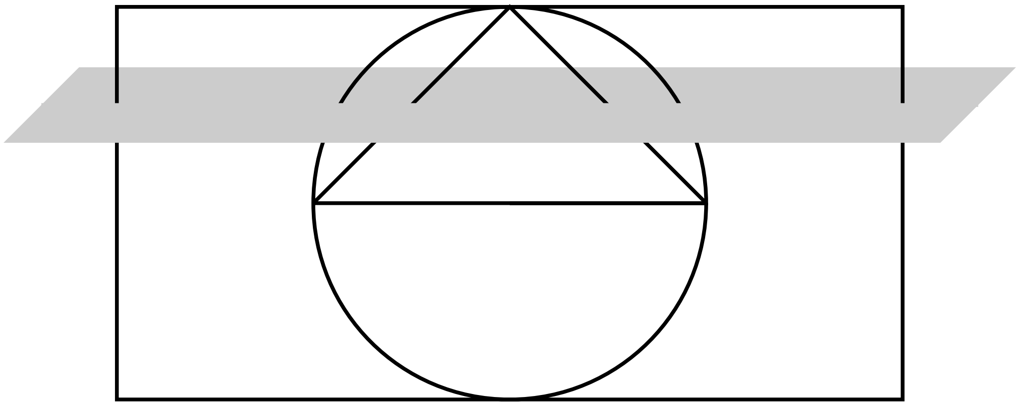


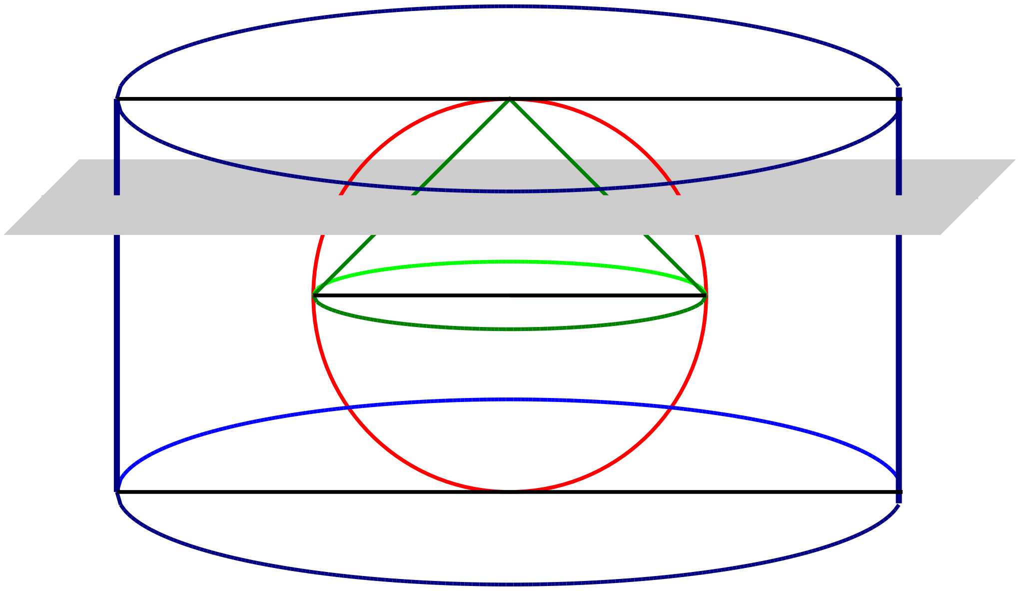


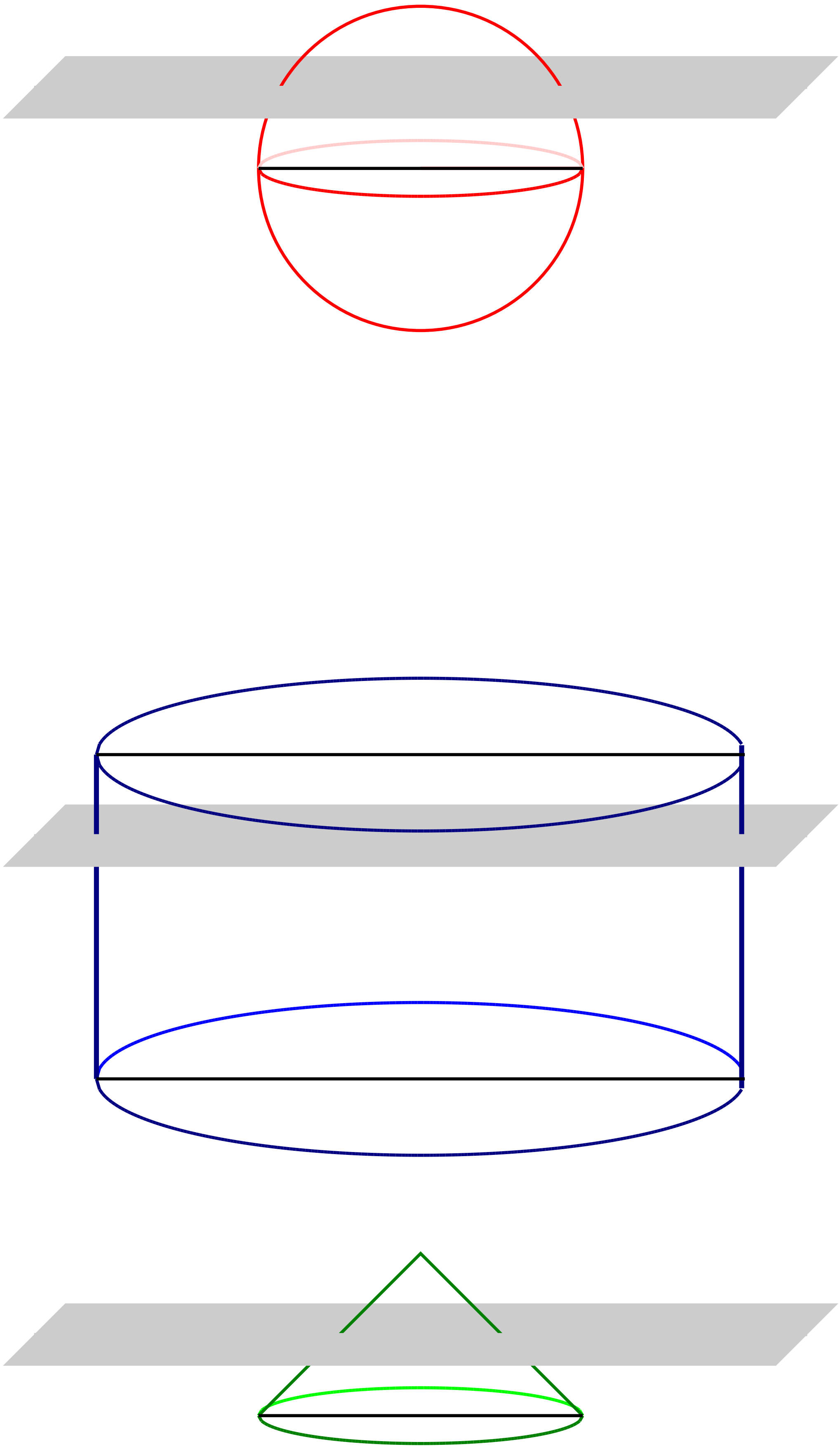


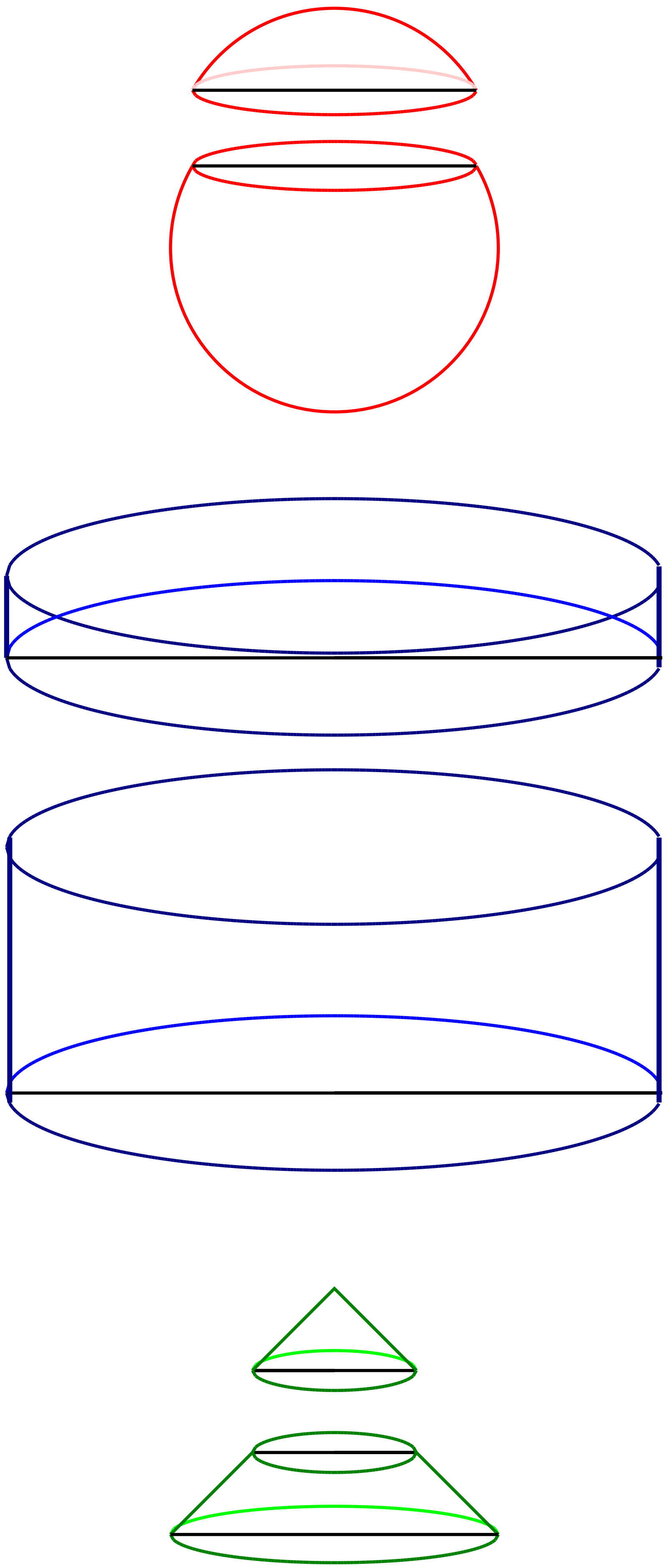


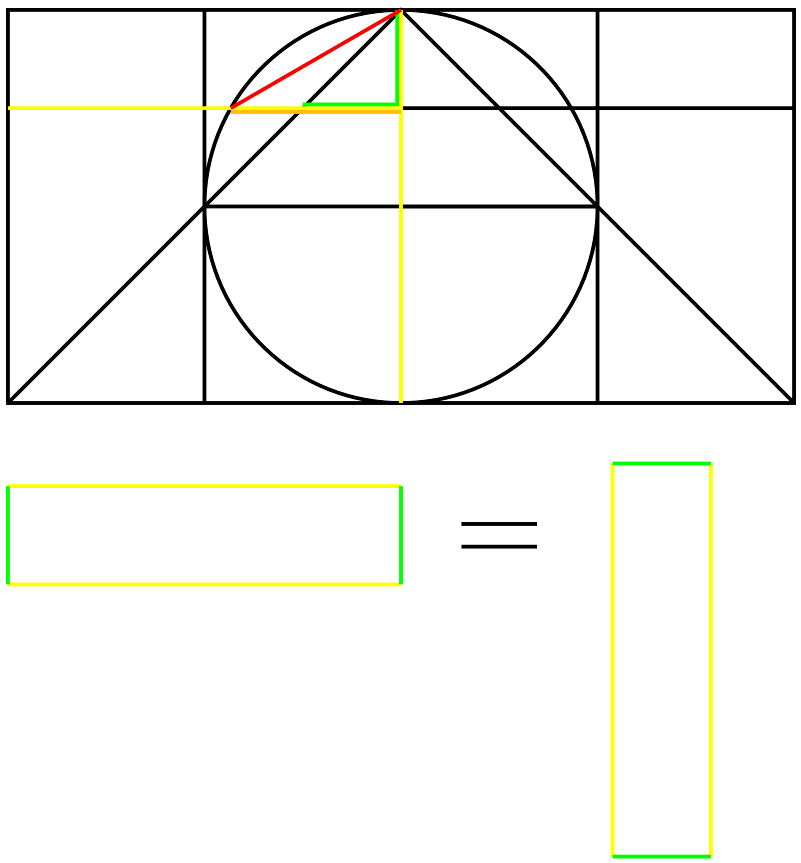


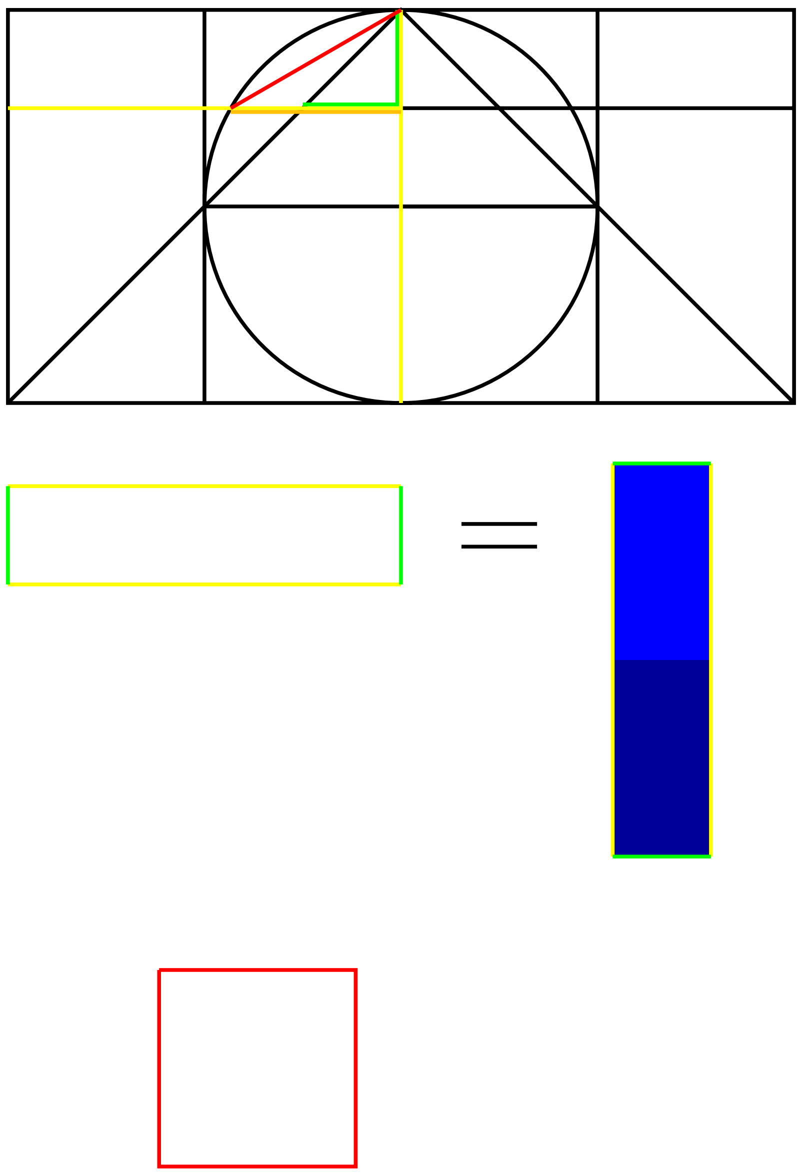


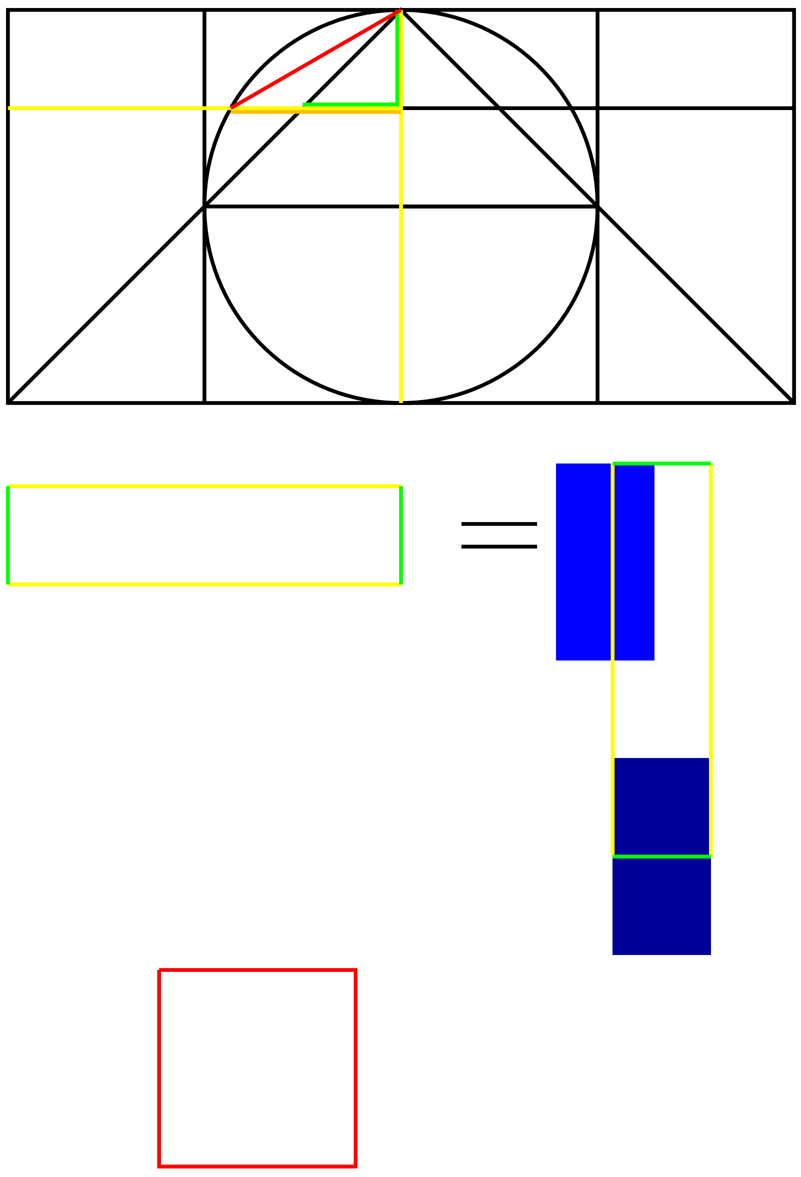


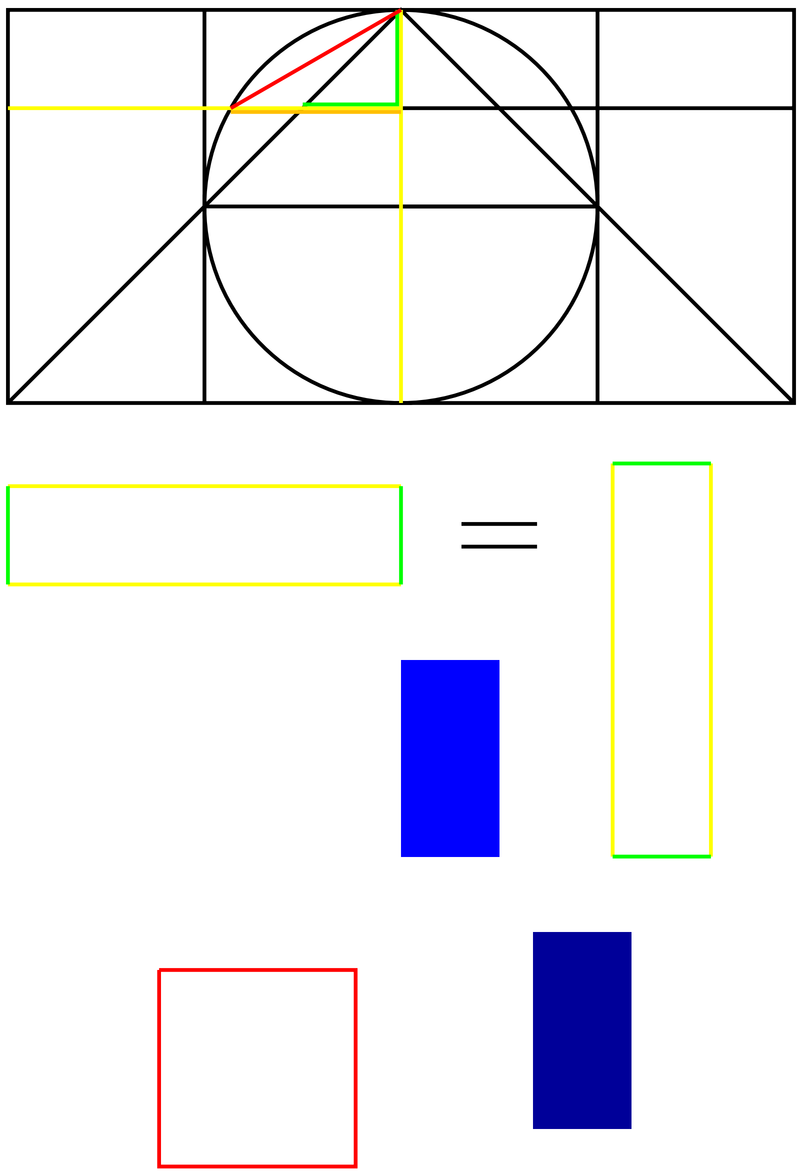


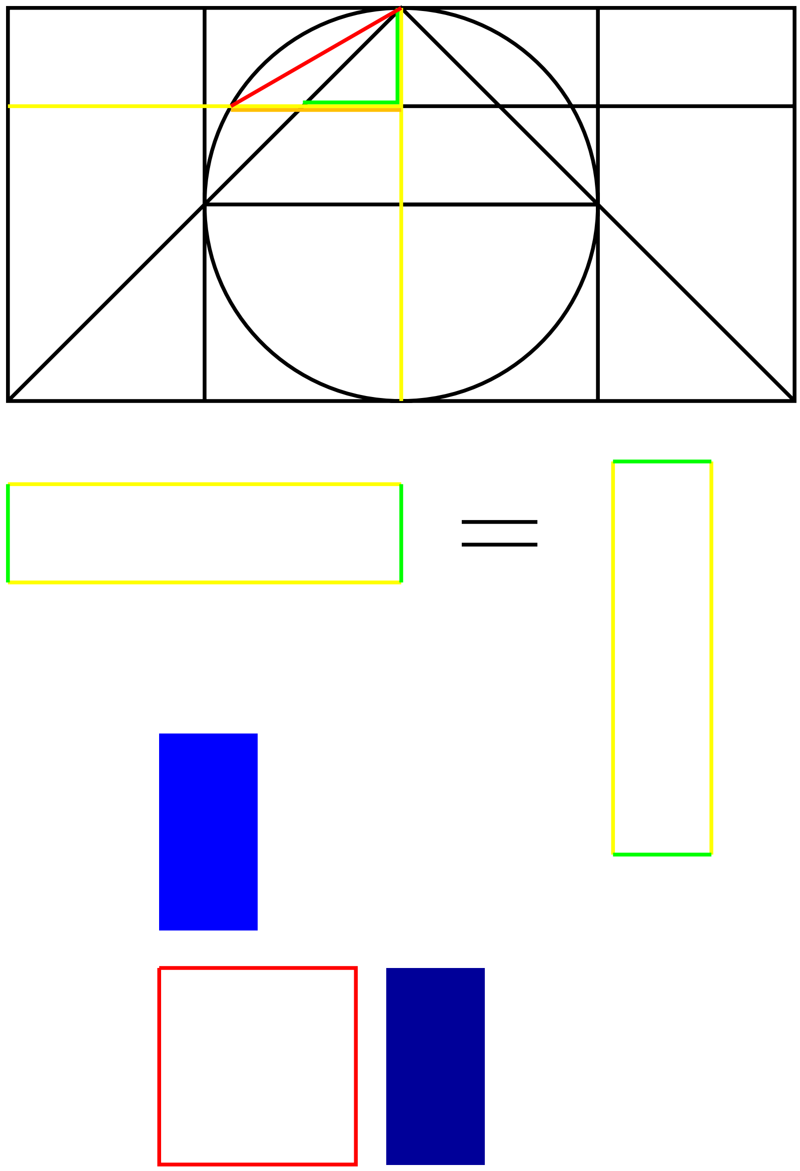


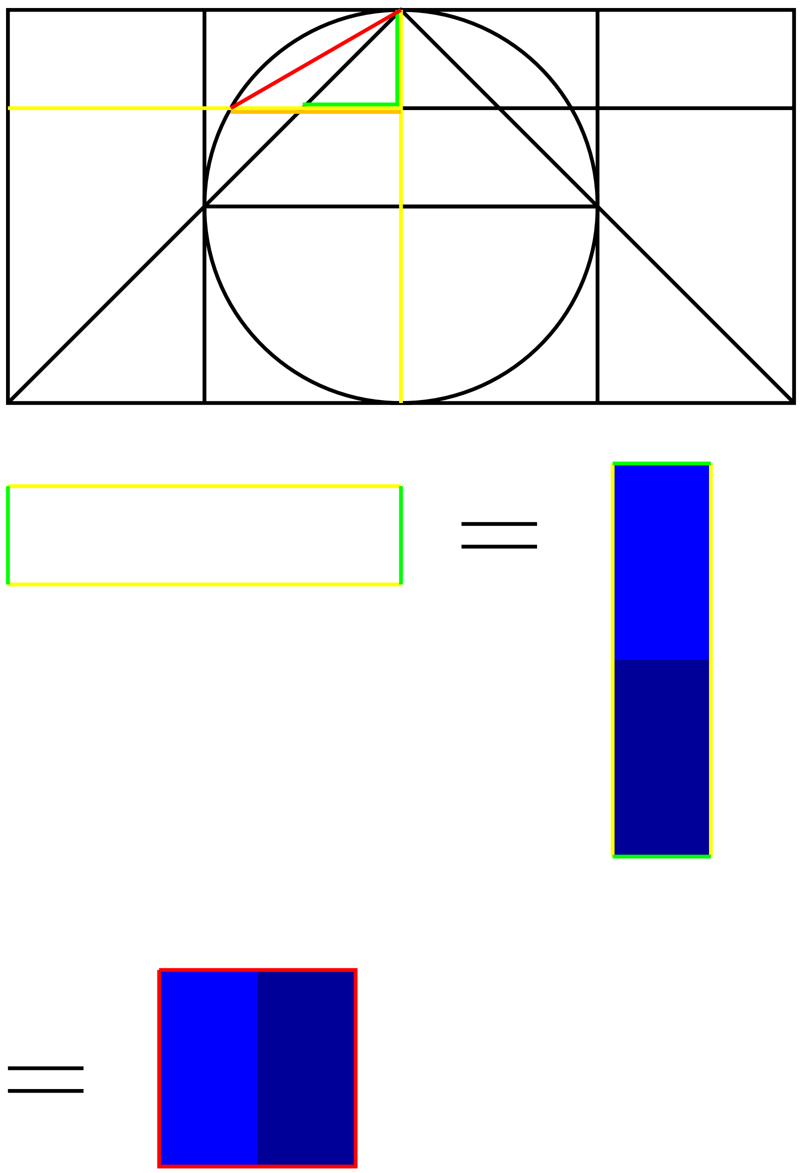


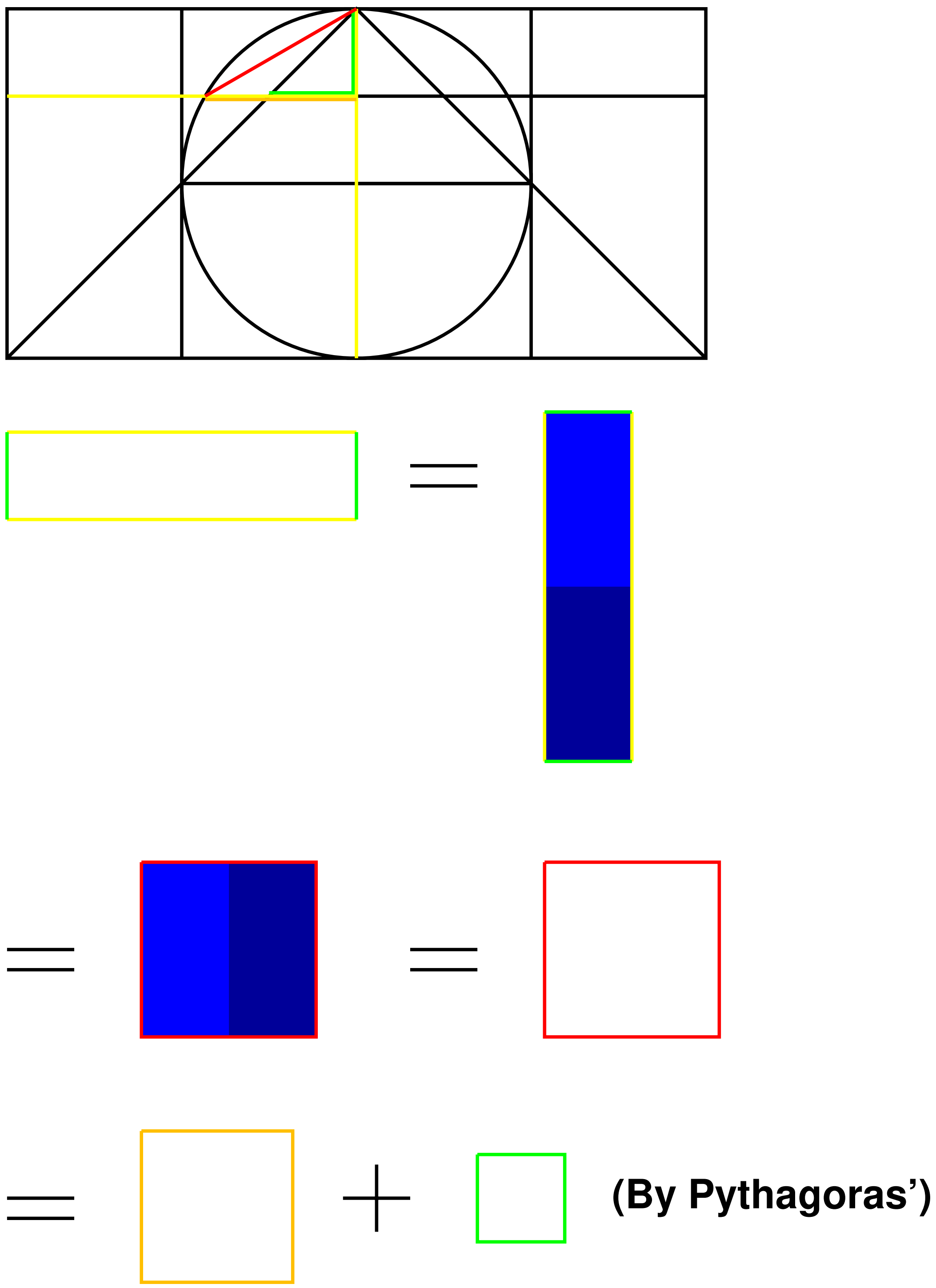


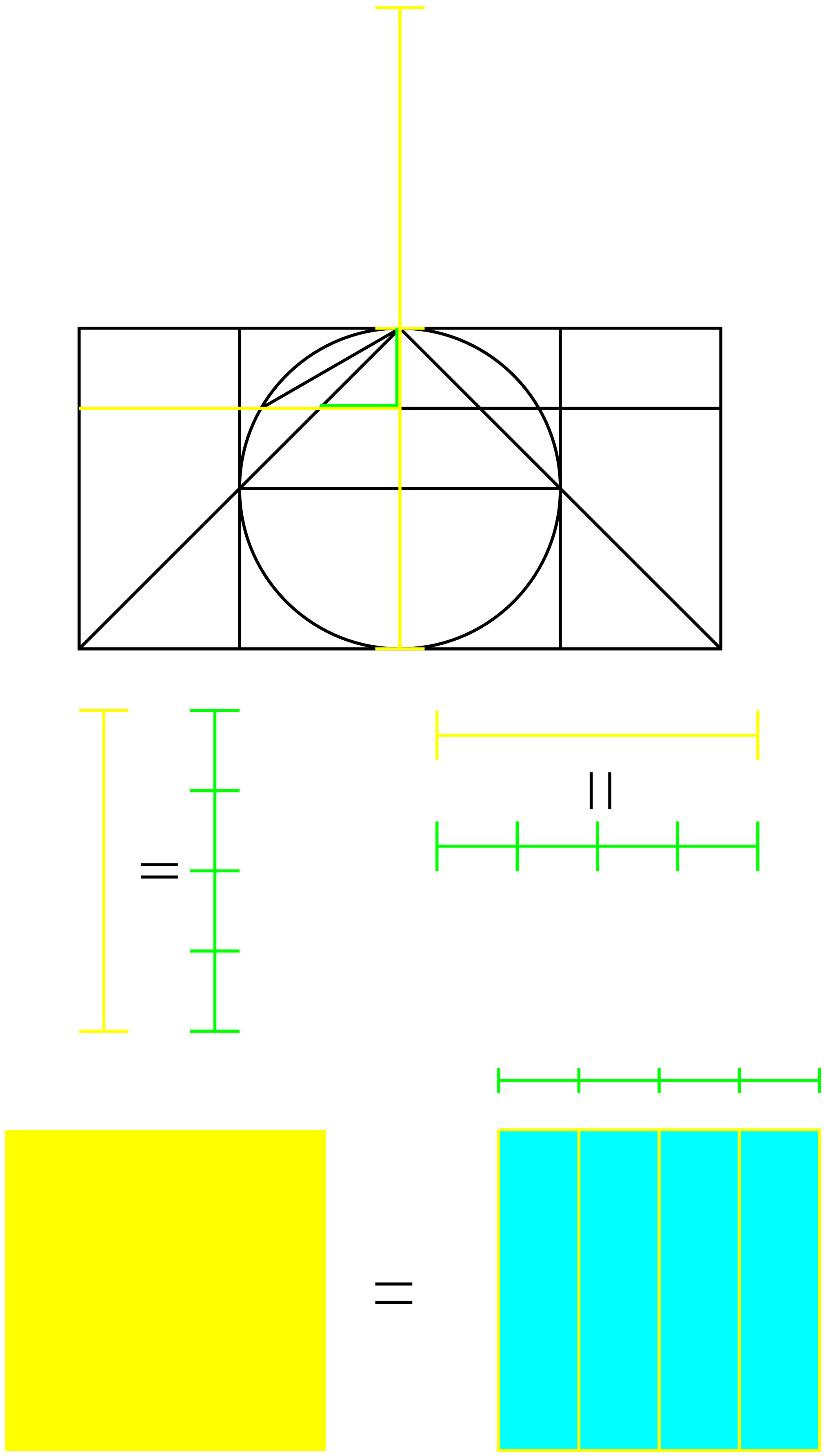


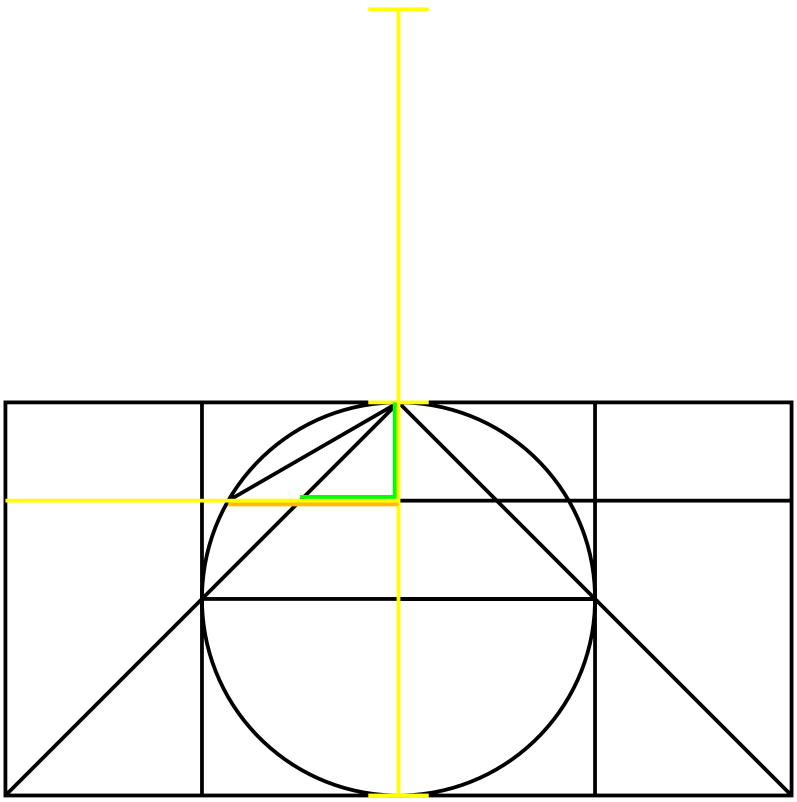


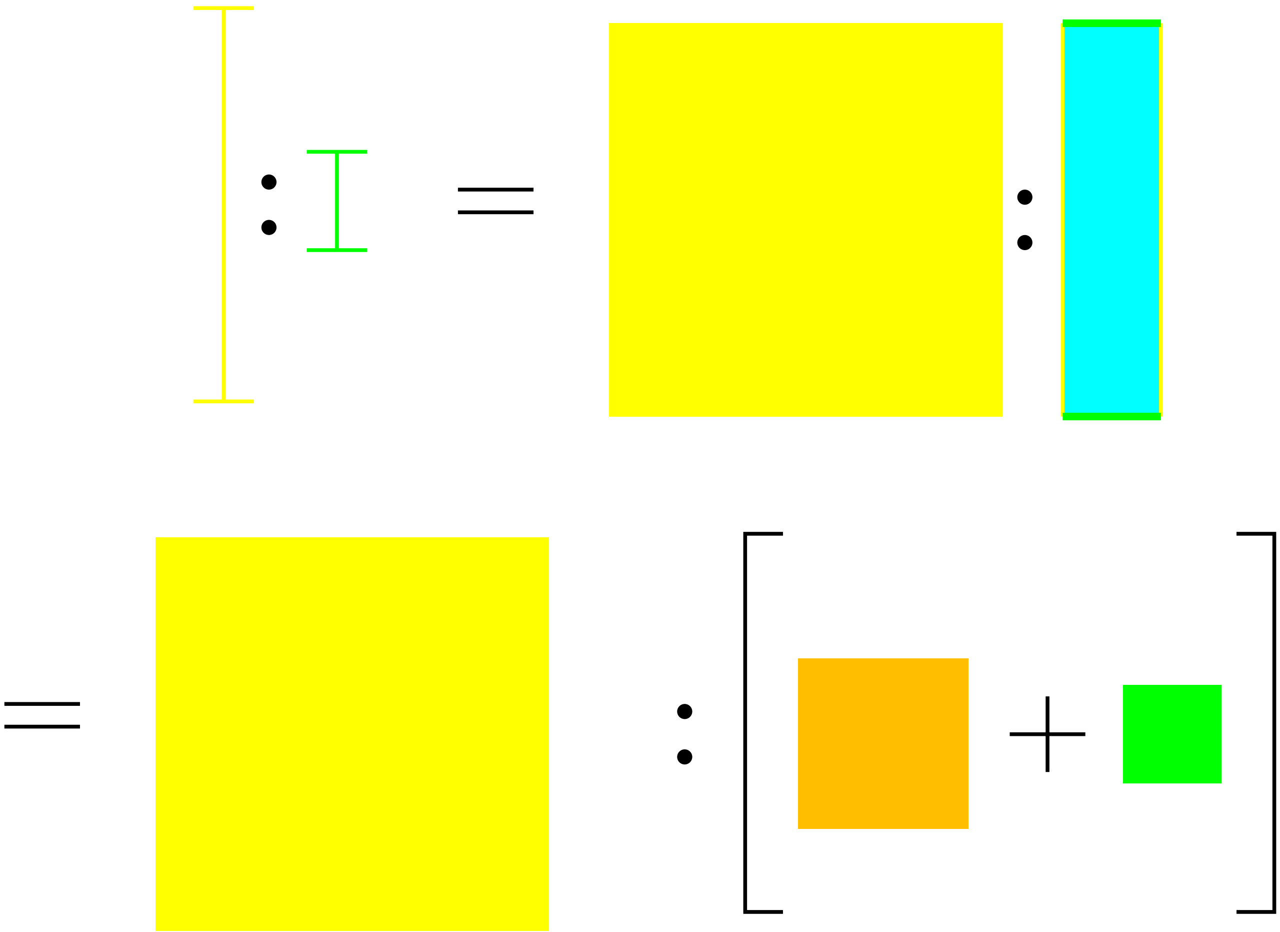




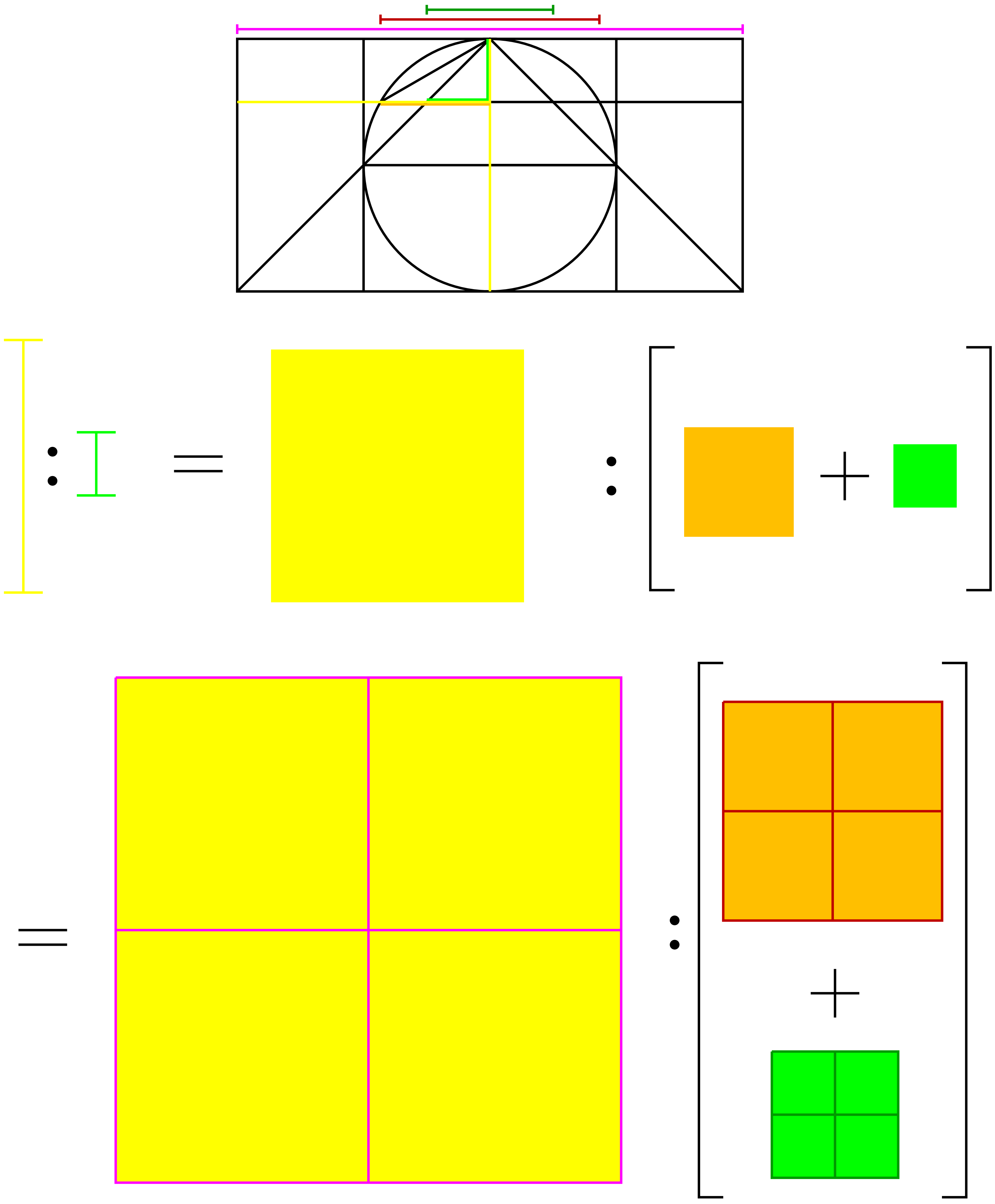

(By Pythagoras')

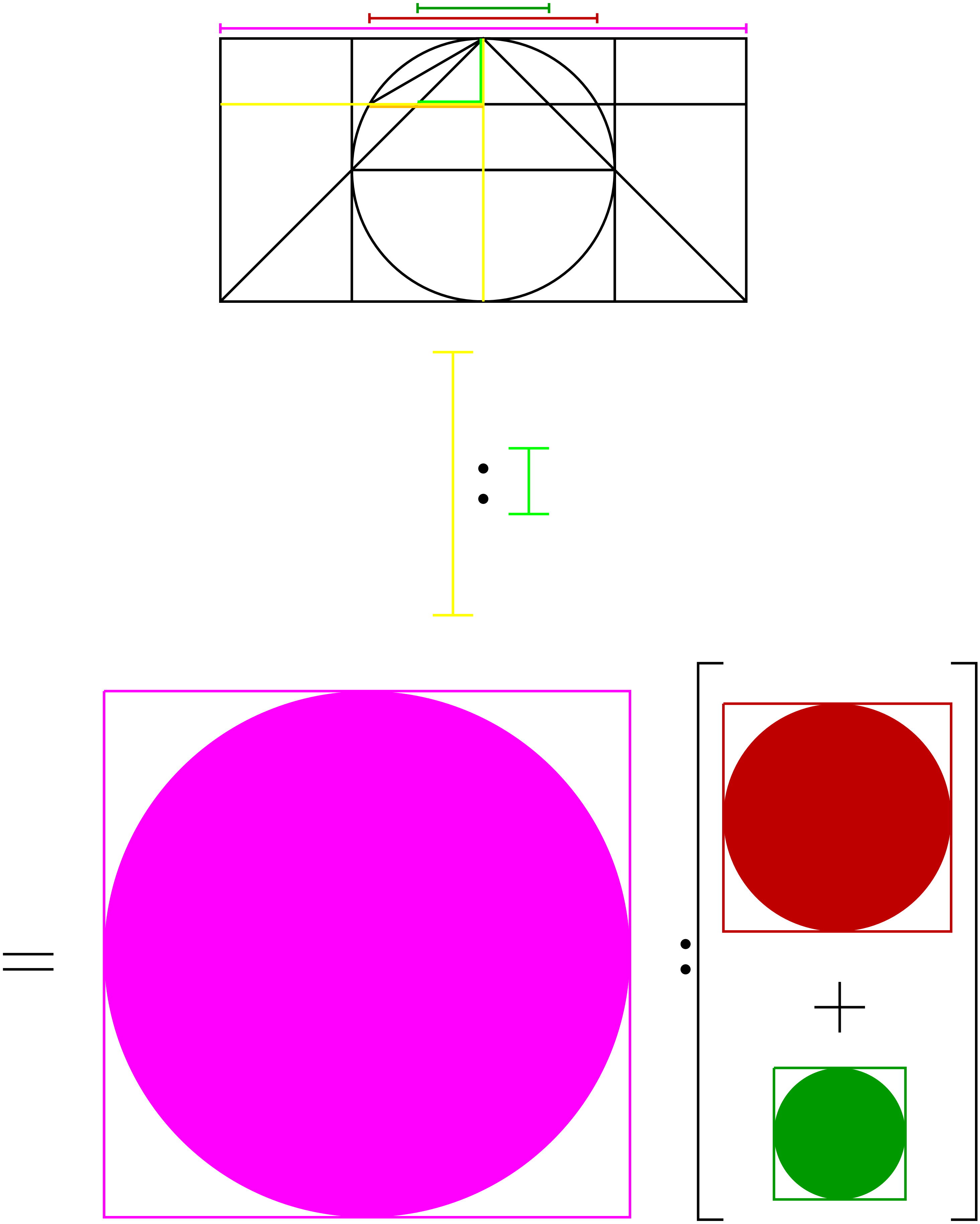


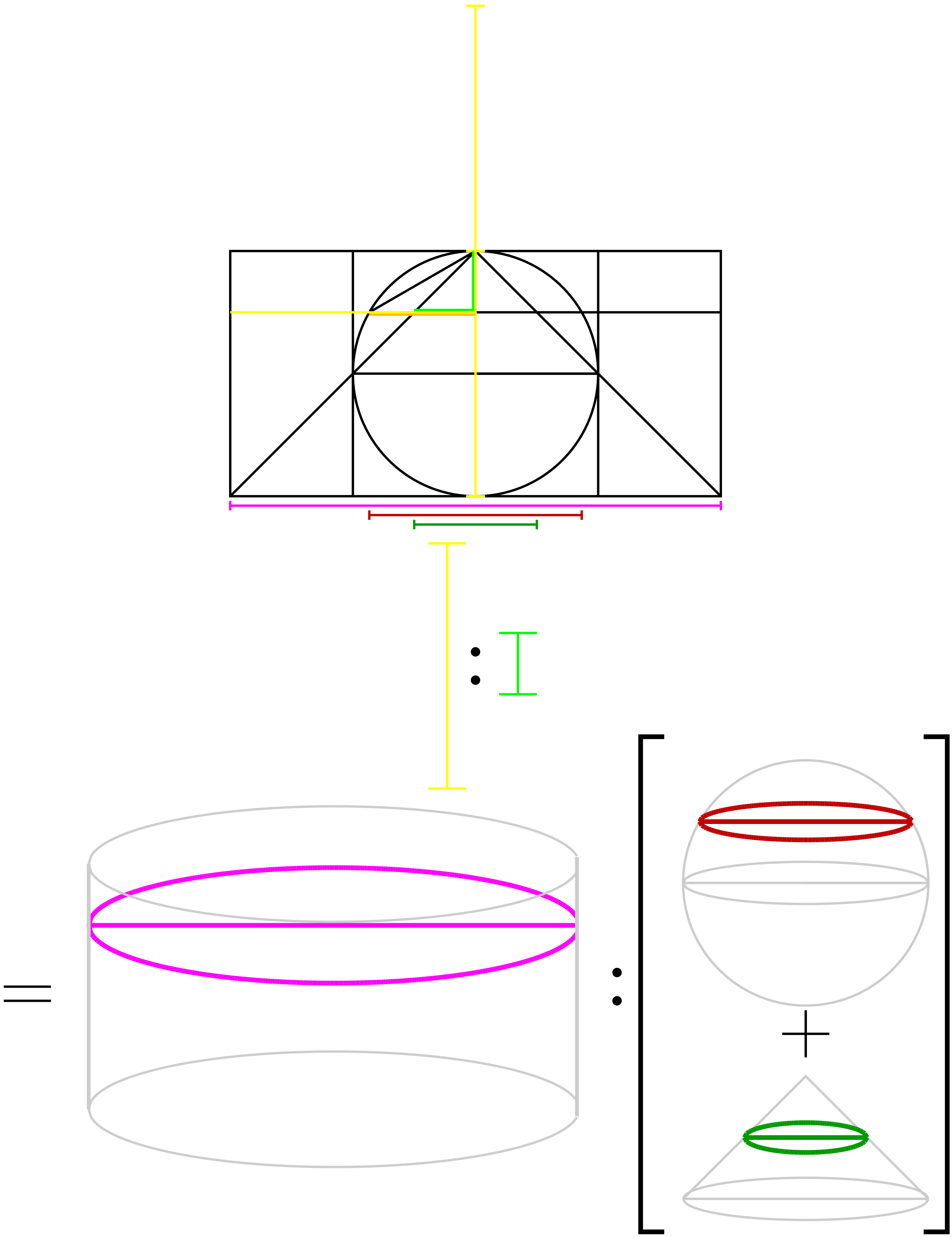




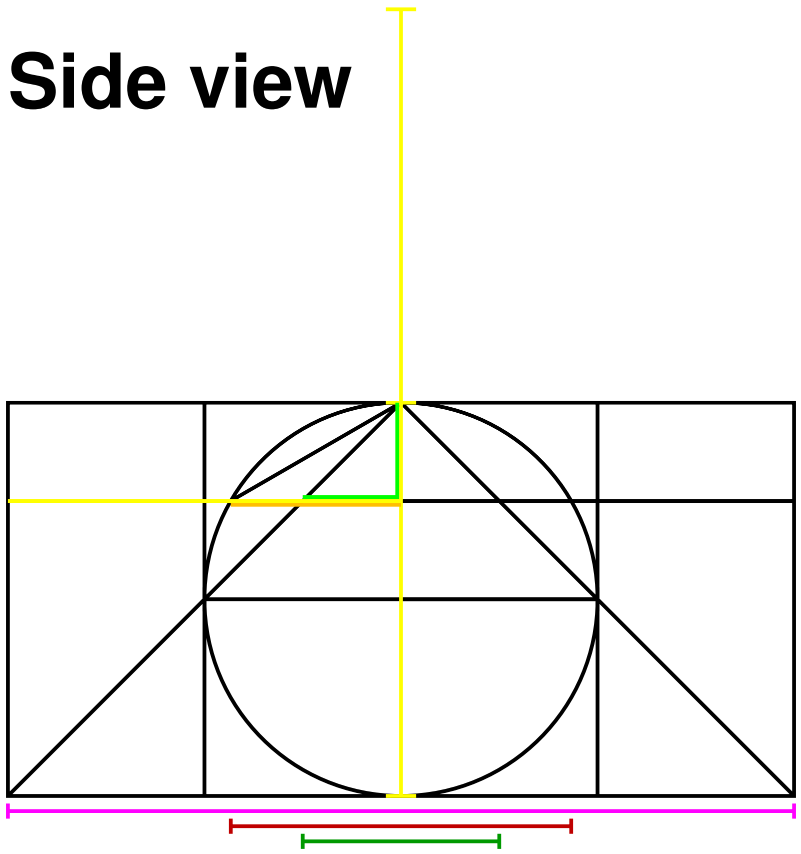
(From last 2 pages)



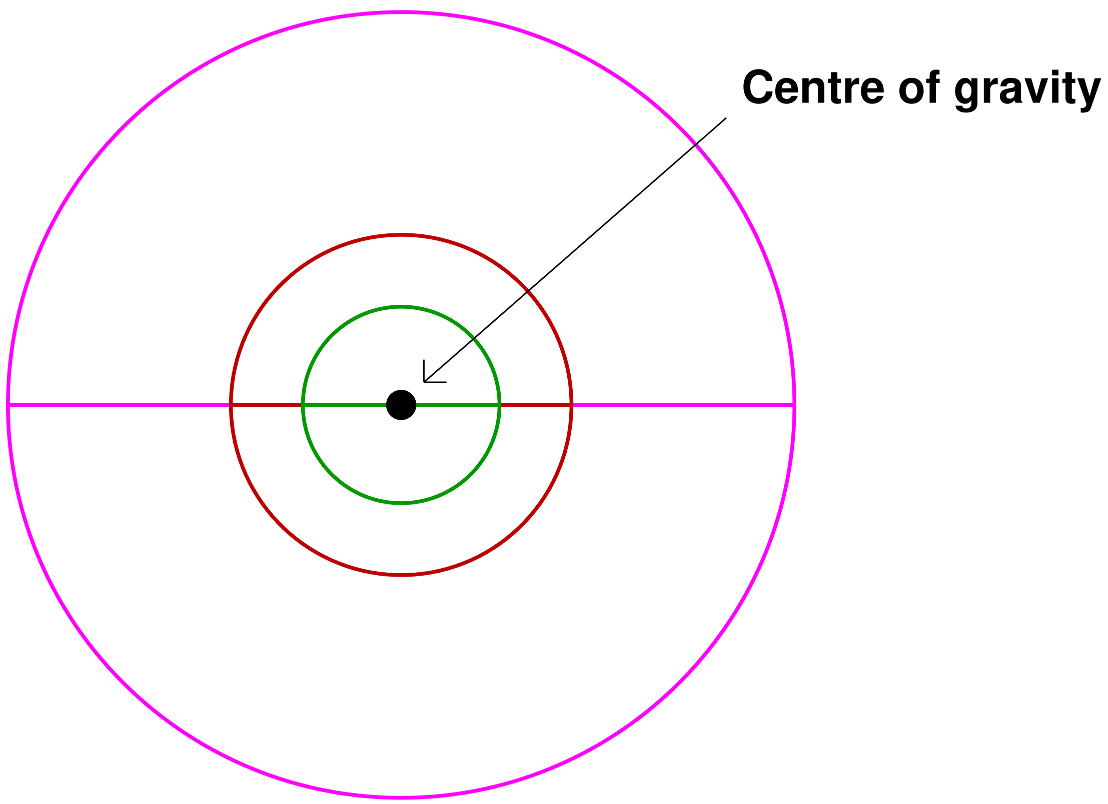




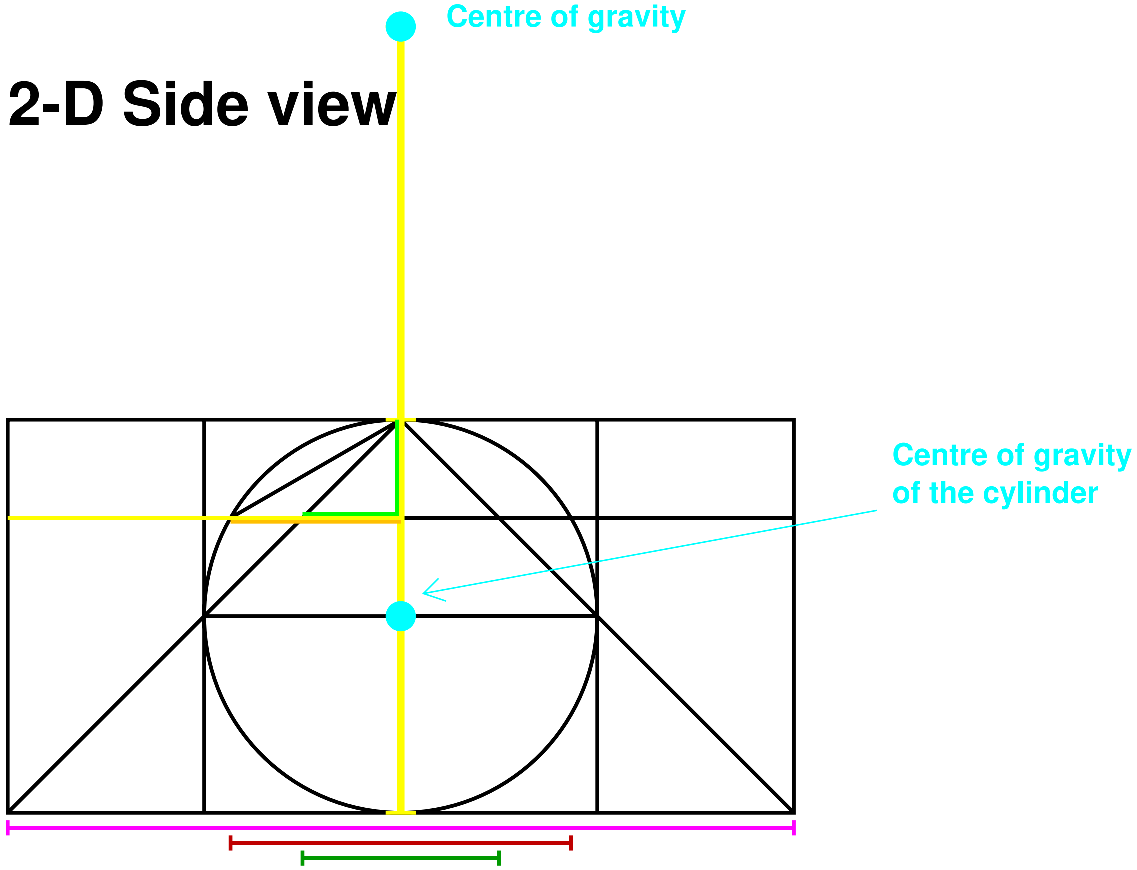
Side view



Top view

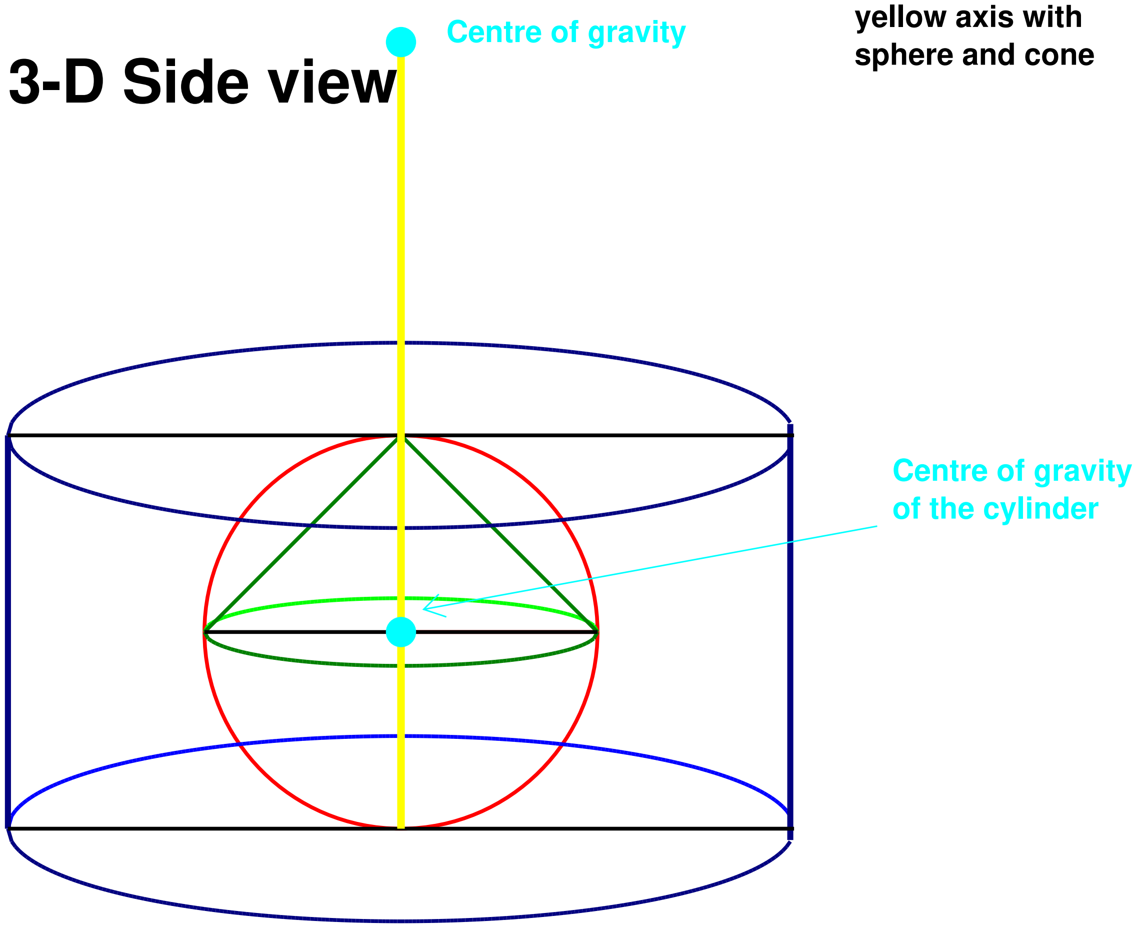


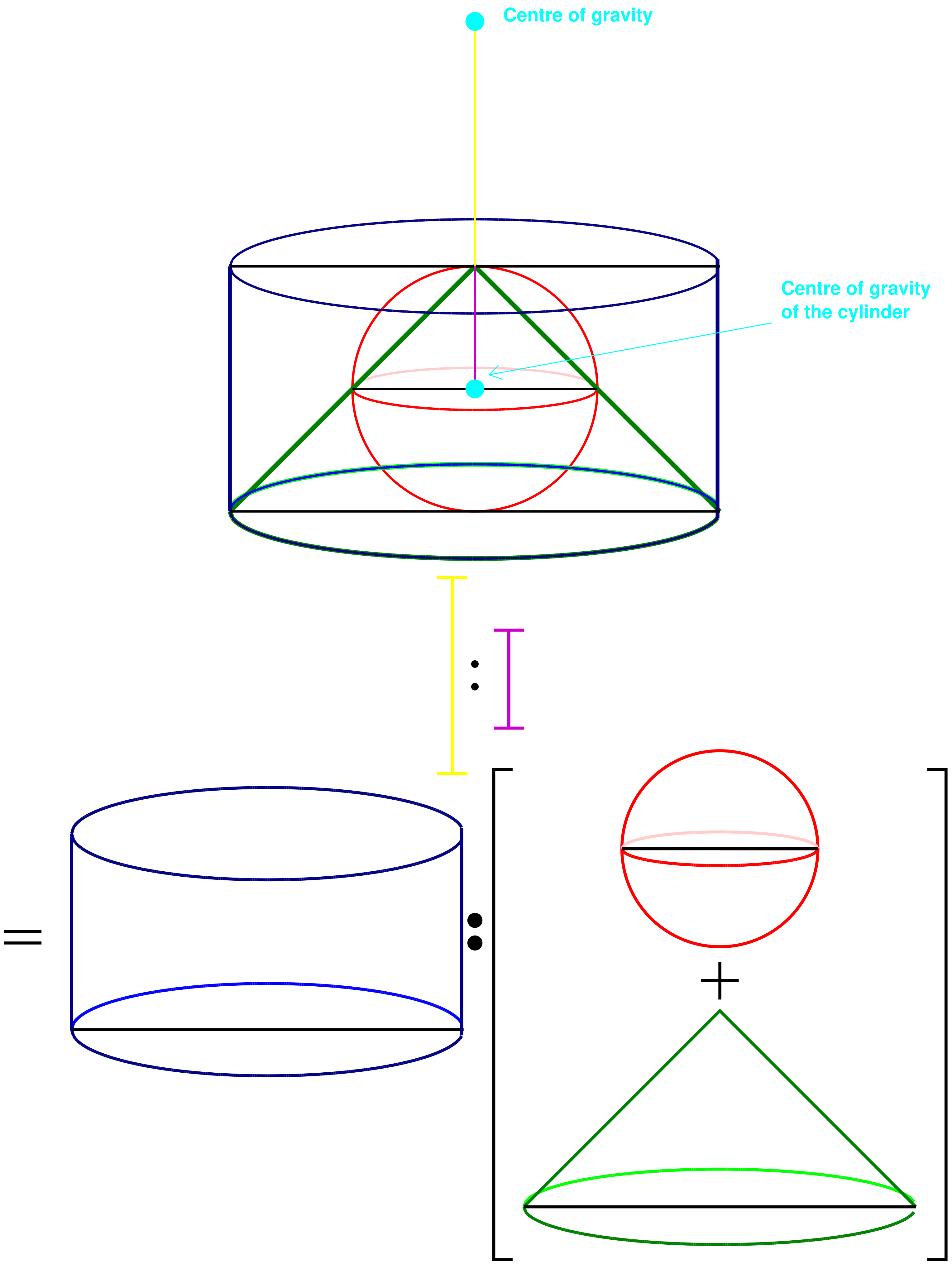
2-D Side view

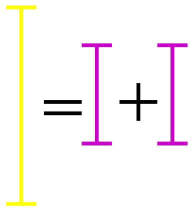


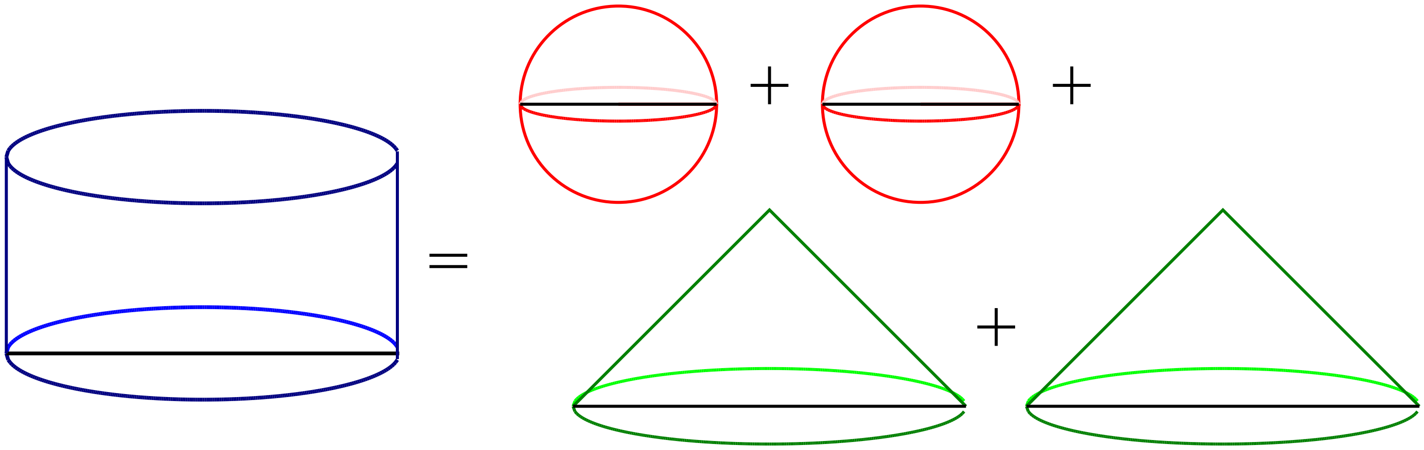
Cylinder will be in equilibrium about yellow axis with sphere and cone

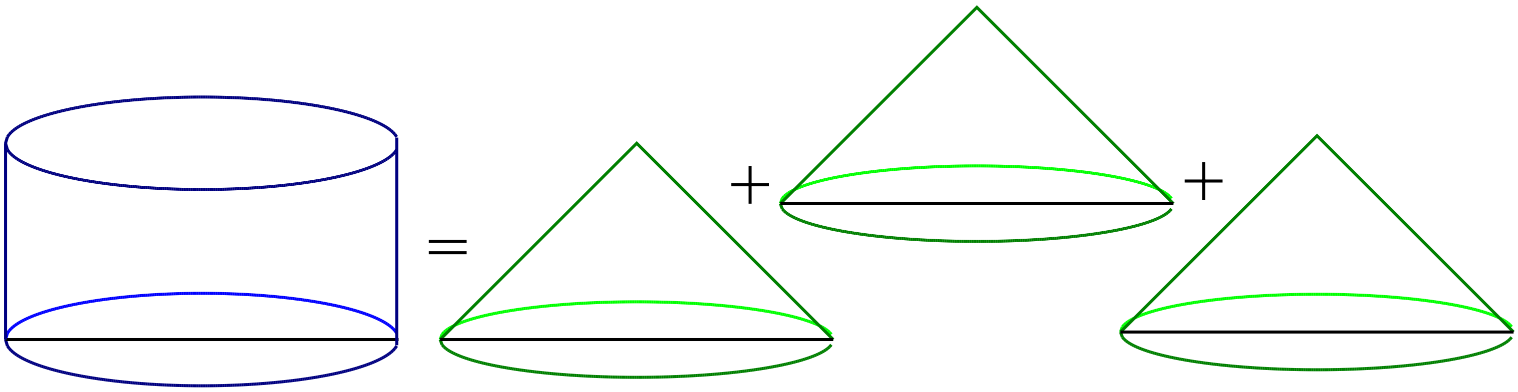
3-D Side view

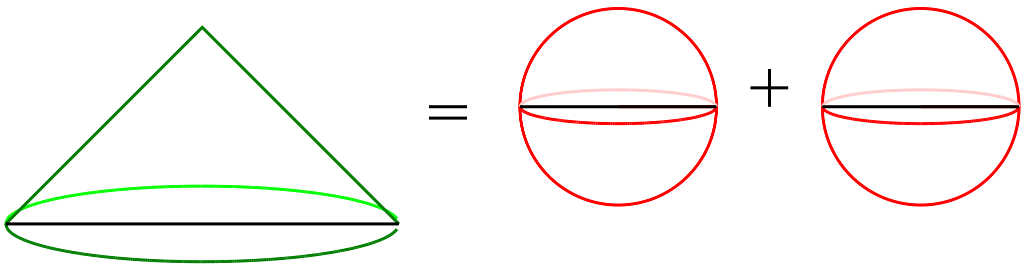


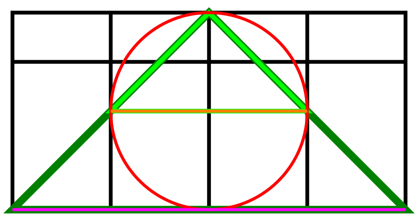

Centre of gravity
Centre of gravity
of the cylinder

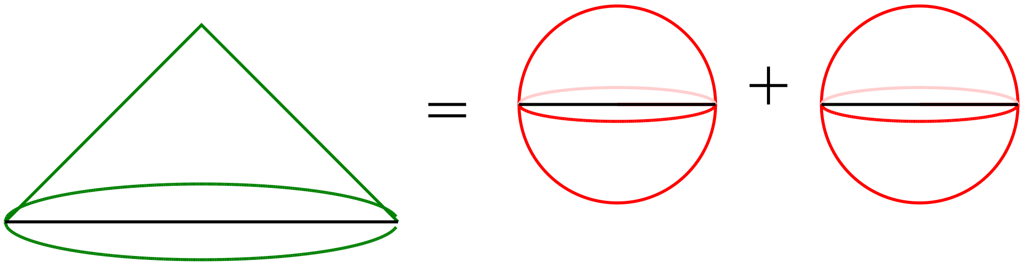


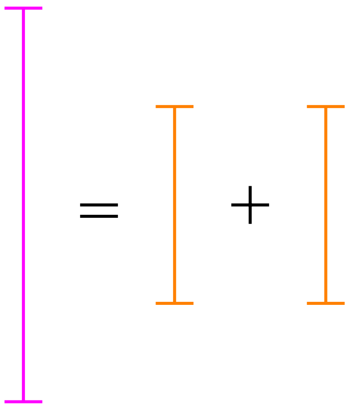


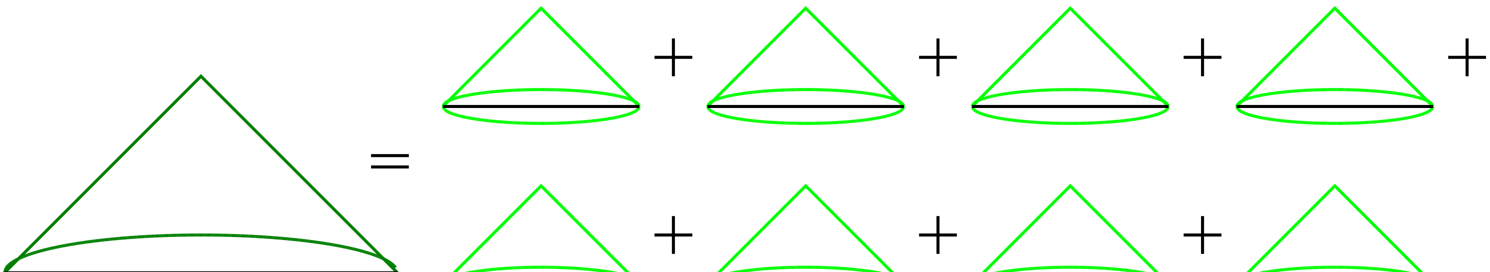


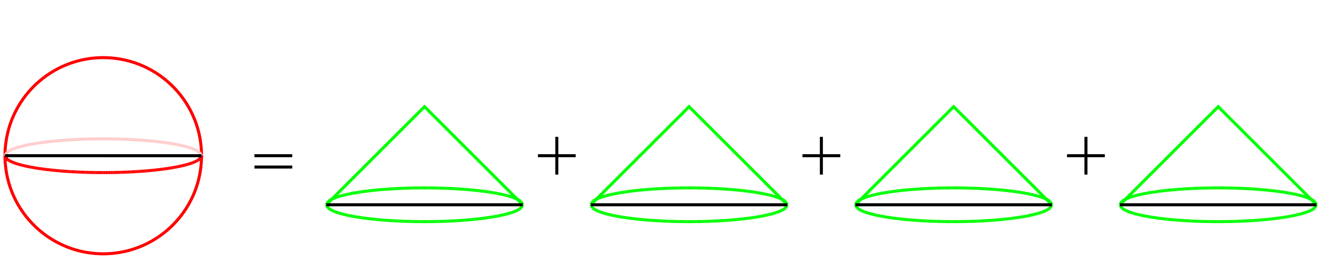




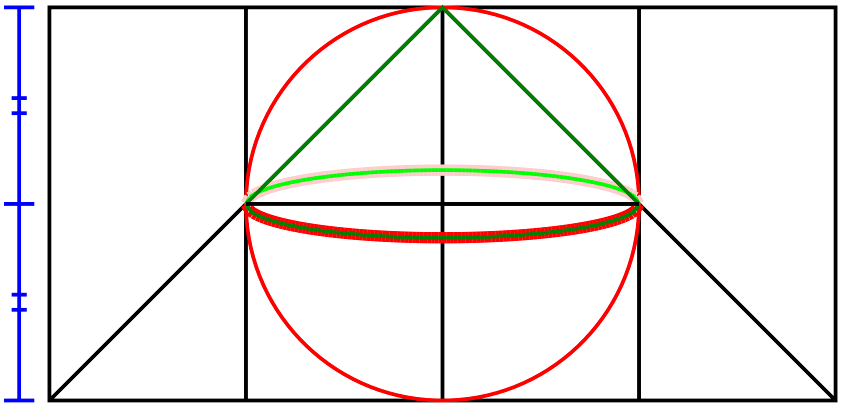


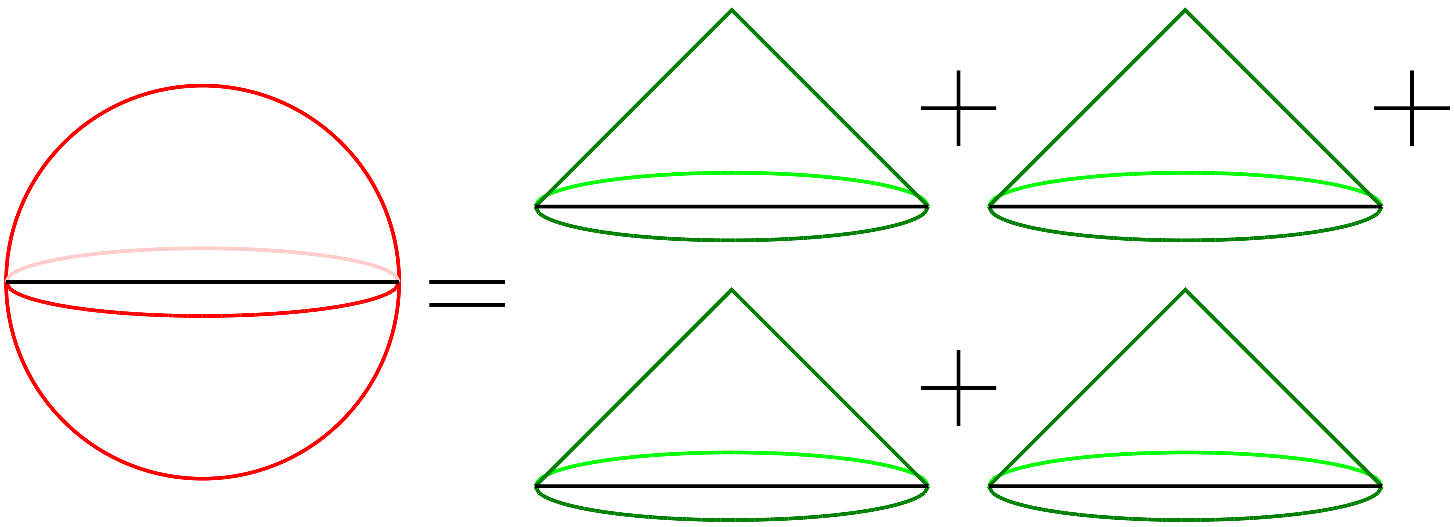




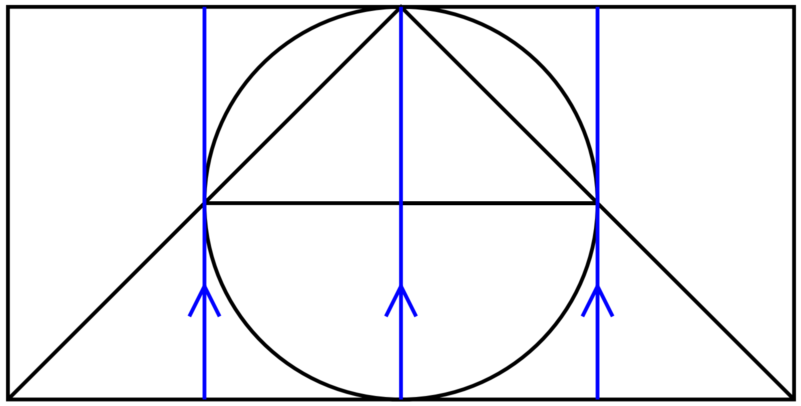


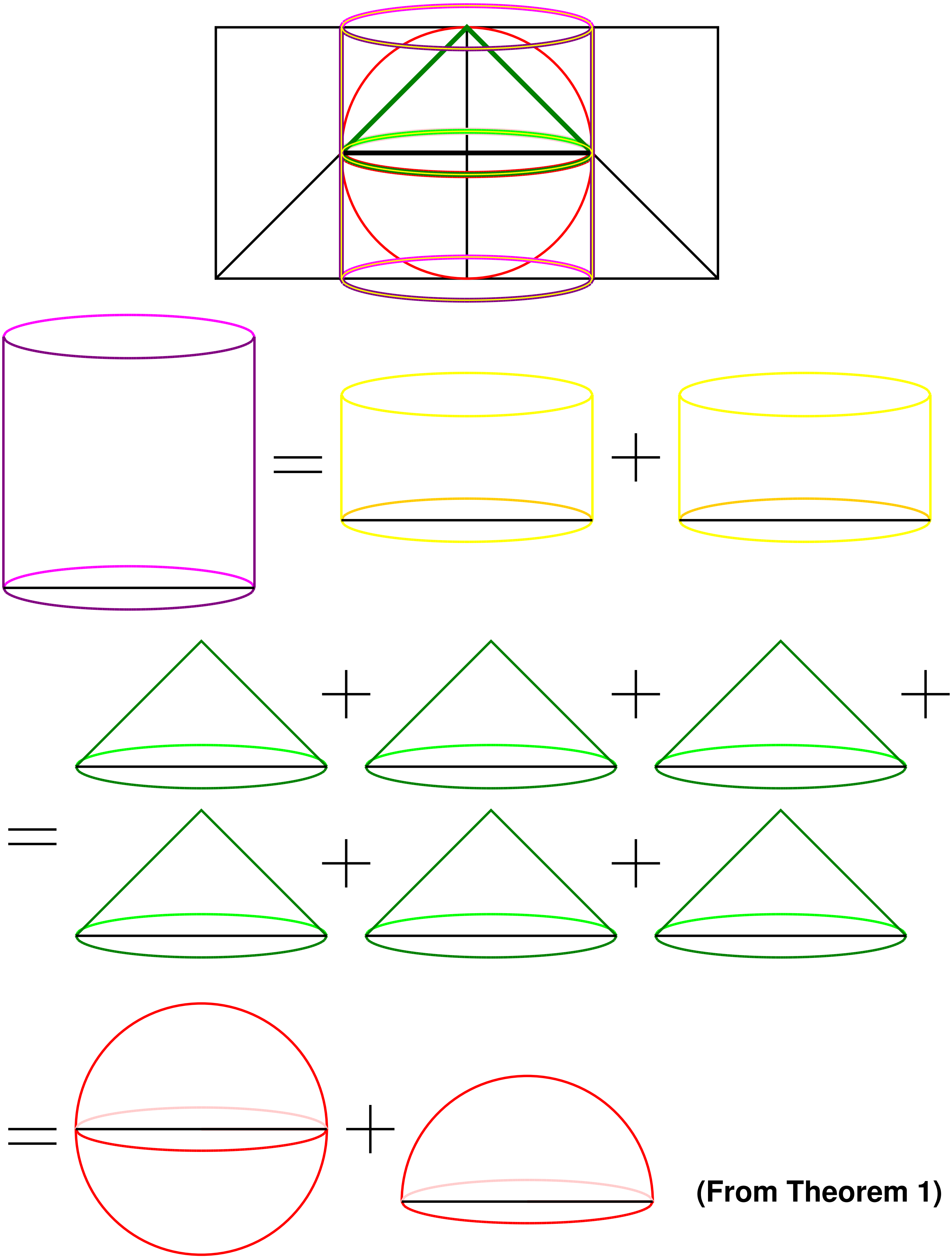
Conclusion:





Theorem 2





(From Theorem 1)

Conclusion: