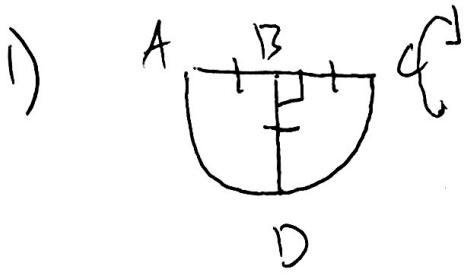
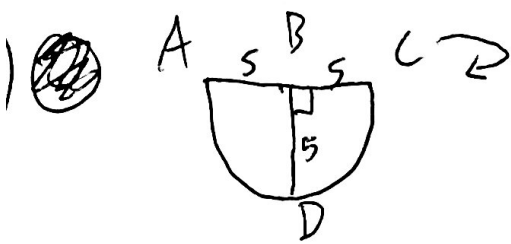


Geometry 2D → 3D Review



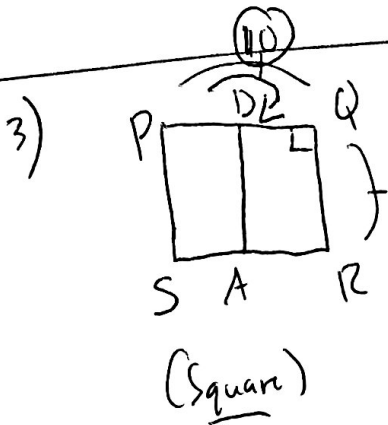
Sphere (4)



half sphere (hemisphere)

$$r = 5$$

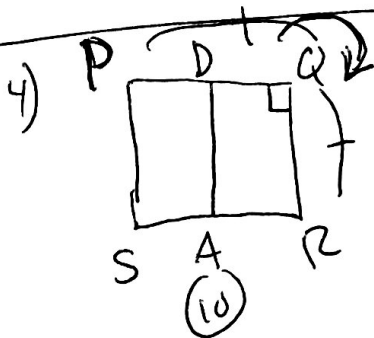
$$V = \frac{1}{2} \cdot \frac{4}{3} \pi (5)^3 = \frac{500}{3} \pi = \boxed{\frac{250\pi}{3}} \quad (1)$$



Cylinder $r = 5$ (4)

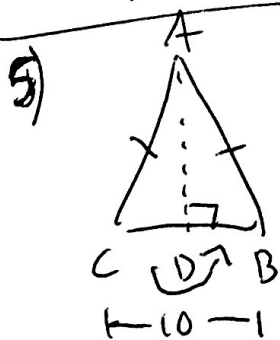
$$V = \pi (5)^2 (10)$$

$$V = 250\pi$$

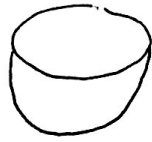
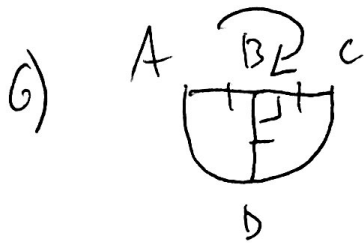


Cylinder $r = 10$

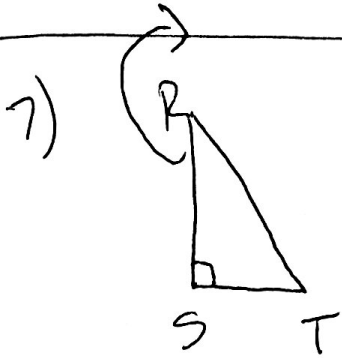
(2)



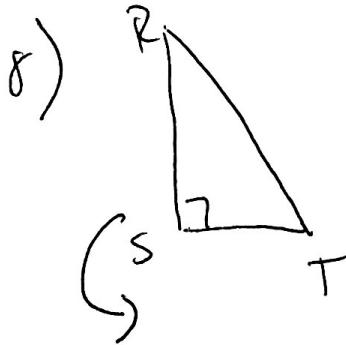
Cone $r = 5$ (3)



hemispherical



Cylinder w/ cone hole in center



Cone

9) No b/c if you rotate you will always have a circular base + pyramid/prism must have a polygon base