Surface Area and Volume of a Pyramid and a Sphere

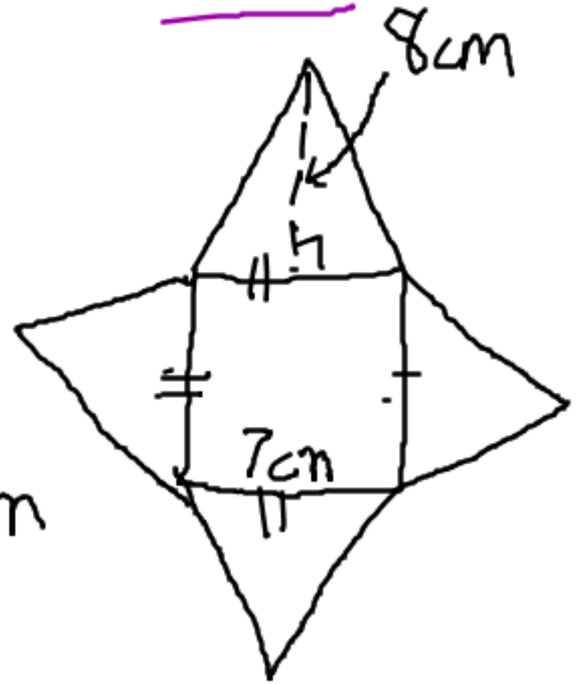
Mar. 29

pg. 492

$$SA = lw + \cancel{4}^{2}\left(\frac{bh}{\cancel{2}}\right)$$ Formula

① 

Net

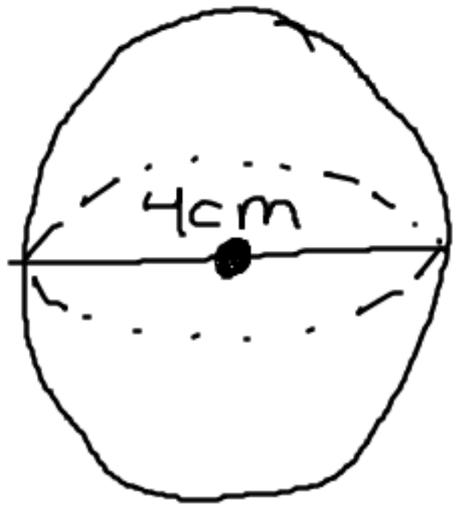


$SA = (7)(7) + 2(7)(8)$

$SA = 49 + 112$

$SA = 161\,cm^2$

3



Net

r: 2cm

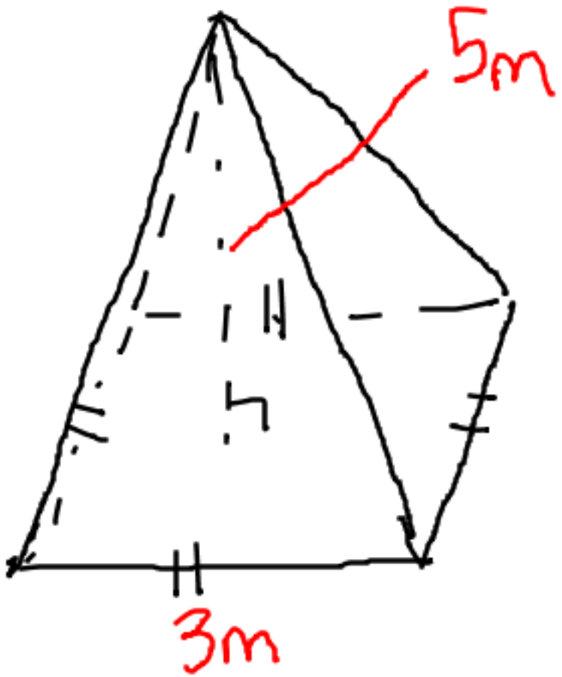
$$SA = 4\pi r^2$$

$$SA = (4)(\pi)(2)^2$$

$$SA = (4)(\pi)(4)$$

$$SA \approx 50.24 cm^2$$

6)



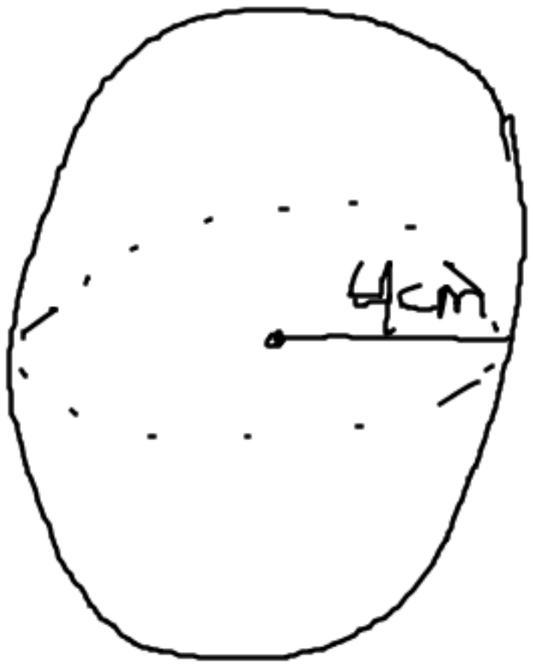
$$V = \frac{lwh}{3}$$

$$V = \frac{(3)(3)(5)}{3}$$

$$V = \frac{45}{3}$$

$$V = 15\,m^3$$

8)



$$V = \frac{4\pi r^3}{3}$$

$$V = \frac{(4)(\pi)(4)^3}{3}$$

$$V = \frac{(4)(\pi)(64)}{3}$$

$$V = \frac{803}{3}$$

$$V = 268\,cm^3$$

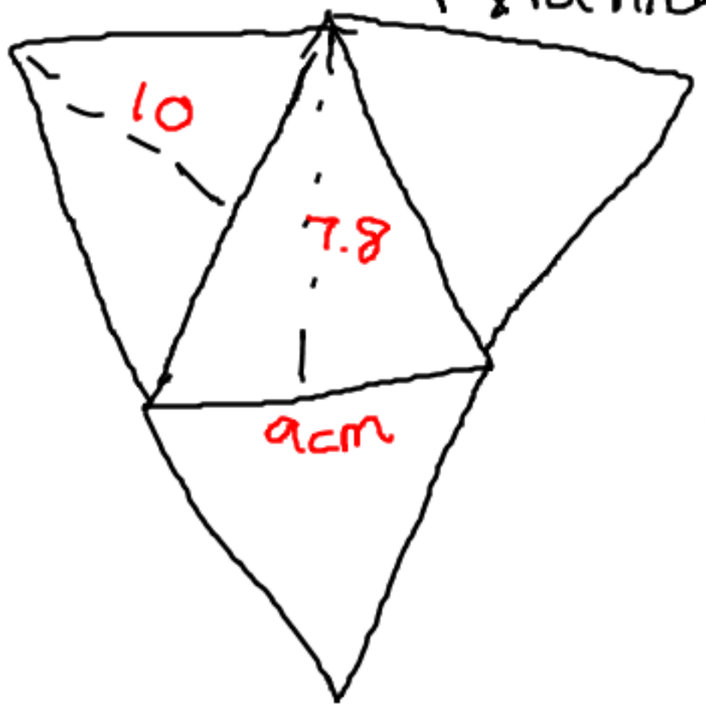
9) on board Find the surface area — draw the net and find the volume

→ include formula

11) For hw:

$$SA = \frac{bh}{2} + 3\left(\frac{bh}{2}\right)$$

Triangular Based Pyramid



$$SA = \frac{9(7.8)}{2} + \frac{3(9)(10)}{2}$$

$$SA = \frac{70.2}{2} + \frac{270}{2}$$

$$SA = 35.1 + 135$$

$$SA = 170.1\ cm^2$$

Do #14 on boards: find volume and surface area

Homework

pg. 292 # 2.4, 5.7, 10, 11. 12, 15

Handout front + back

due Thursday