

3-5-18 5<sup>th</sup> Geo

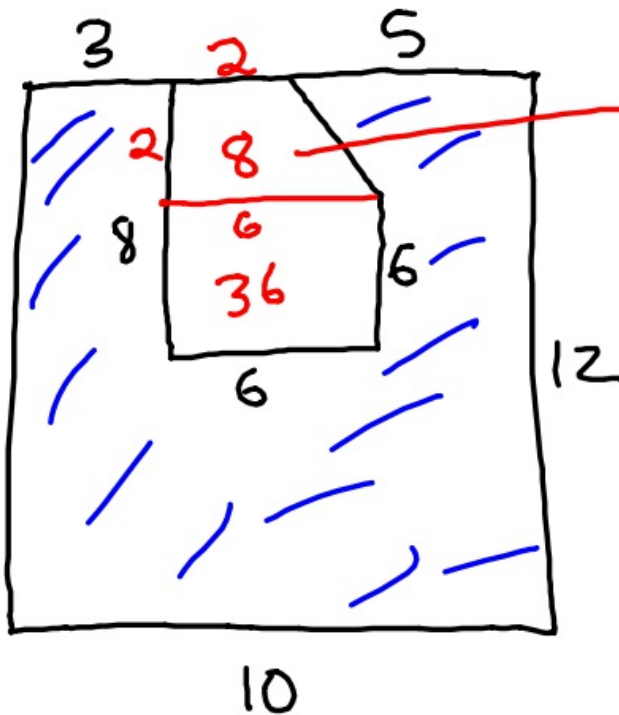
Ch. 10 PT 2

③



$$\begin{aligned} V &= \frac{1}{3} B h \\ &= \frac{1}{3} \cdot 81 \cdot 6 \\ &= 162 \text{ cm}^3 \end{aligned}$$

①⑦



$$\begin{aligned} &\frac{1}{2} \cdot h \cdot (b_1 + b_2) \\ &\frac{1}{2} \cdot 2 \cdot (6+2) \cdot 8 \end{aligned}$$

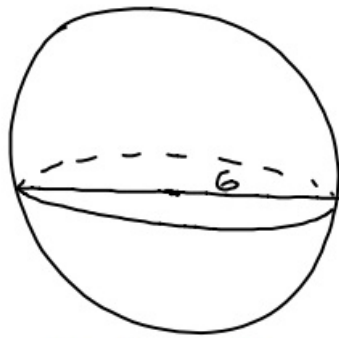
Whole - hole

$$120 - (36+8)$$

$$120 - 44$$

$$76 \text{ cm}^2$$

8



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

$$36\pi$$

$$31.5\pi$$

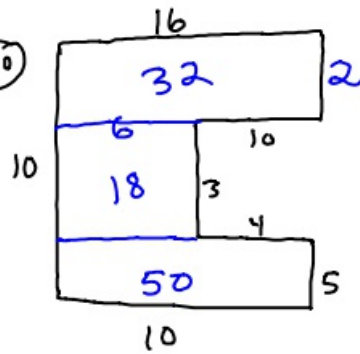
$$99.0 \text{ cm}^3$$



$$V = \frac{4}{3} \cdot \pi \cdot (1.5)^3$$

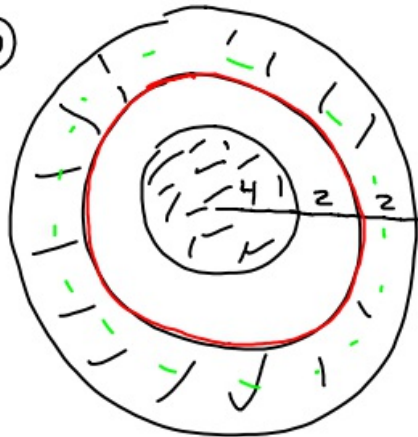
$$4.5\pi$$

20



$$32 + 18 + 50 = 100 \text{ cm}^2$$

20



Whole - hole

$$\pi \cdot 9^2 - \pi \cdot 6^2$$

$$64\pi - 36\pi$$

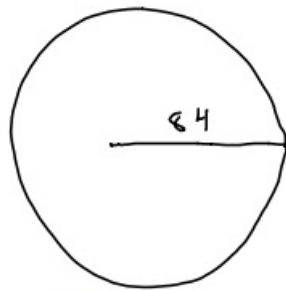
center

$$28\pi + 16\pi$$

$$44\pi$$

$$138.2 \text{ cm}^2$$

10



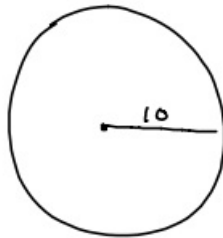
$$C = \pi \cdot d$$

$$= \pi \cdot 168$$

$$\approx 527.8 \text{ ft.}$$

$$1 \text{ mile} = \frac{5280 \text{ ft.}}{527.8} \approx 10 \text{ laps}$$

9

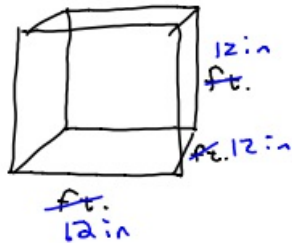


$$= 100 \pi$$

$$\approx 314 \text{ ft}^2$$

New practice

① How many cubic inches are in a cubic foot?



$$1,728 \text{ in}^3$$

② The area of a circle is  $78.5 \text{ cm}^2$ . What is the diameter?

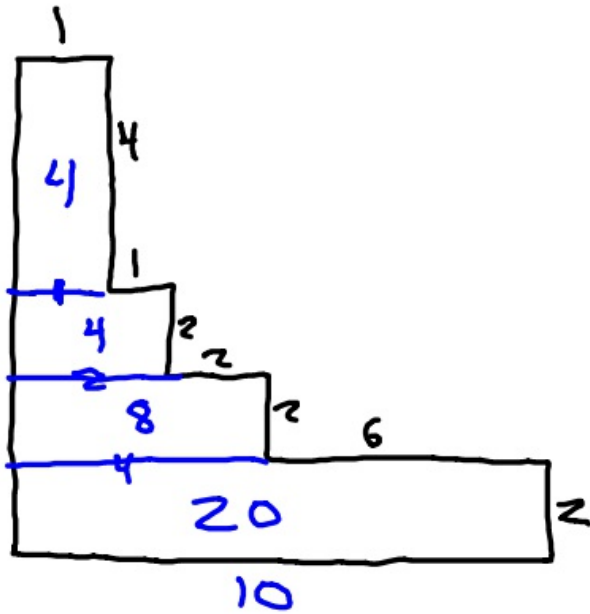
$$A = \pi r^2$$

$$\frac{78.5}{\pi} = \frac{\pi \cdot r^2}{\pi}$$

$$25 \approx r^2$$

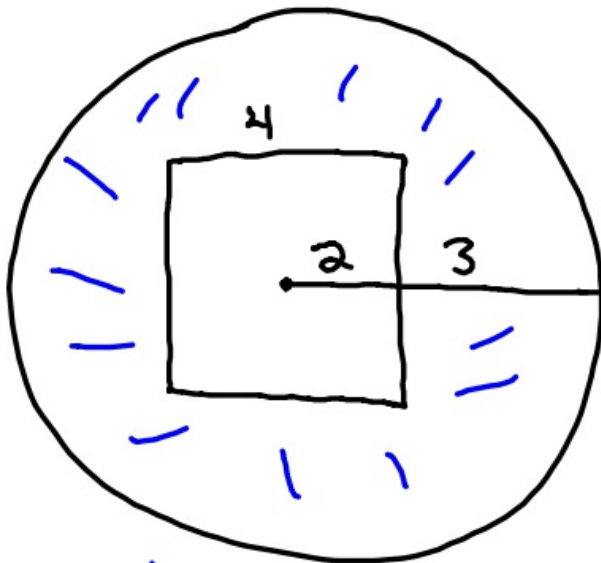
$$r = 5 \therefore \text{diameter} = 10 \text{ cm.}$$

③



$$20 + 8 + 4 + 4 = 36 \text{ cm}^2$$

④



Whole - hole

$$\pi \cdot 5^2 - 4 \cdot 4$$

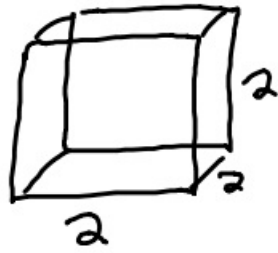
$$25\pi - 16$$

$$\approx 62.5 \text{ cm}^2$$

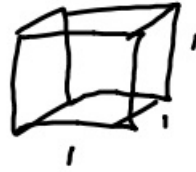
bye bye

3-5-18 6<sup>th</sup> Geo

⑦



-



$$8 \text{ cm}^3 - 1 \text{ cm}^3$$

$$7 \text{ cm}^3$$

⑧



-



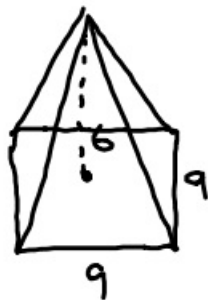
$$V = \frac{4}{3} \cdot \pi \cdot 3^3 - \frac{4}{3} \pi \cdot 1.5^3$$

$$36\pi - 4.5\pi$$

$$31.5\pi$$

$$\approx 100 \text{ cm}^3$$

③

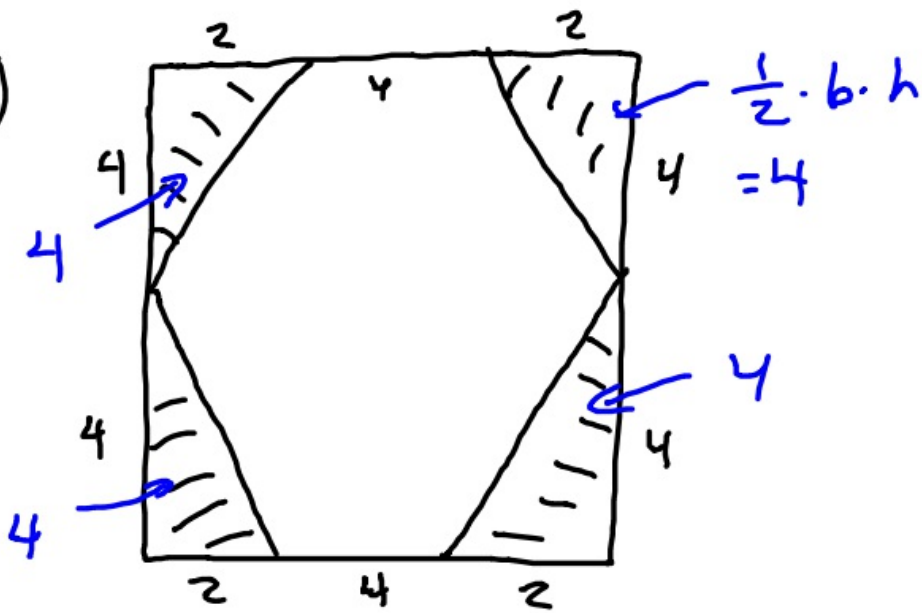


$$V = \frac{1}{3} B \cdot h$$

$$\frac{1}{3} \cdot 81 \cdot 6$$

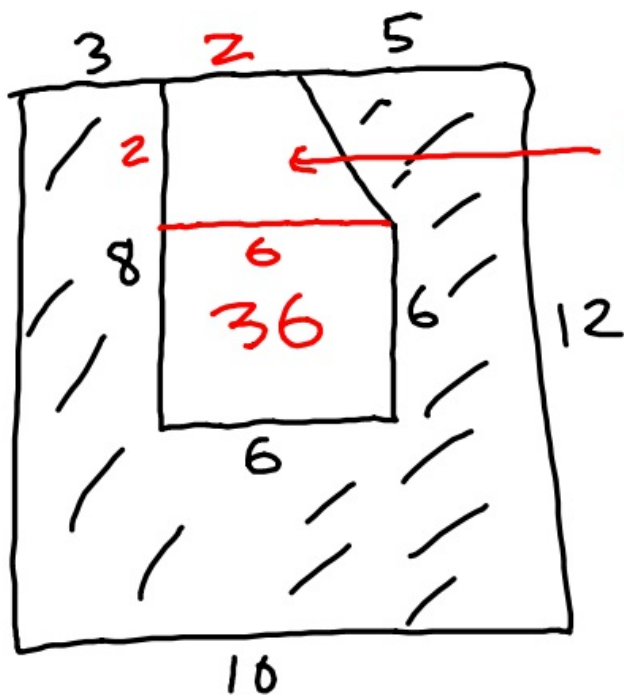
$$162 \text{ cm}^3$$

16



16 cm<sup>2</sup>

17



$$A = \frac{1}{2} \cdot h (b_1 + b_2)$$

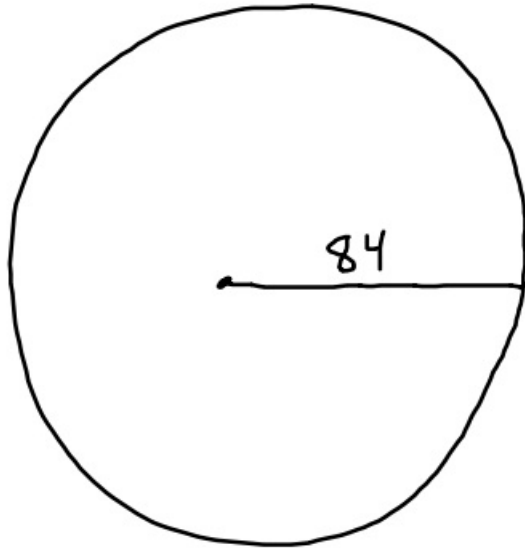
$$\frac{1}{2} \cdot 8 (2 + 6)$$

Whole - hole

$$120 - (36 + 8)$$

76 cm<sup>2</sup>

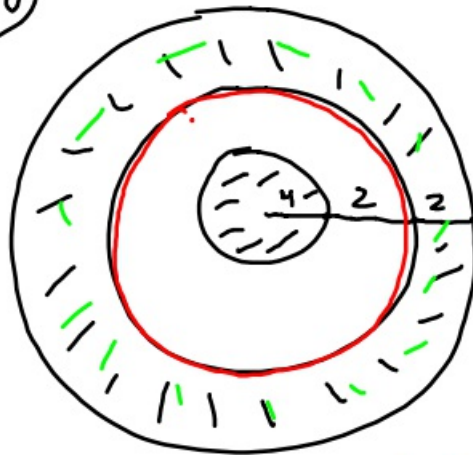
10



$$\begin{aligned}C &= \pi \cdot d \\ &= \pi \cdot 168 \\ &\approx 527.8\end{aligned}$$

$$\frac{5280}{527.8} \approx 10 \text{ laps}$$

20



Whole - hole

$$\pi \cdot 8^2 - \pi \cdot 6^2$$

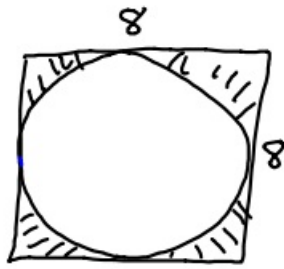
$$64\pi - 36\pi$$

$$28\pi + 16\pi$$

$$44\pi \text{ cm}^2$$

Center

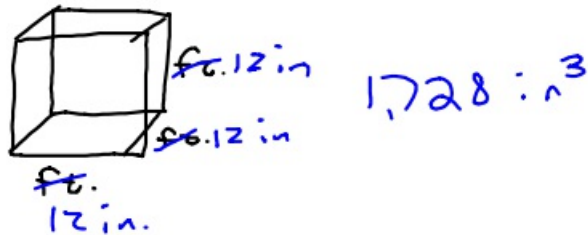
13



Whole - hole  
 $8 \cdot 8 - \pi \cdot 4^2$   
 $64 - 16\pi$

New Practice

- ① How many cubic inches are in a cubic foot?



- ② My pizza is  $78.5 \text{ in}^2$ . What is its diameter?

$$A = \pi r^2$$
$$\frac{78.5}{\pi} = \frac{\pi \cdot r^2}{\pi}$$
$$25 \approx r^2$$
$$r = 5$$

$\therefore$  diameter = 10 in.



