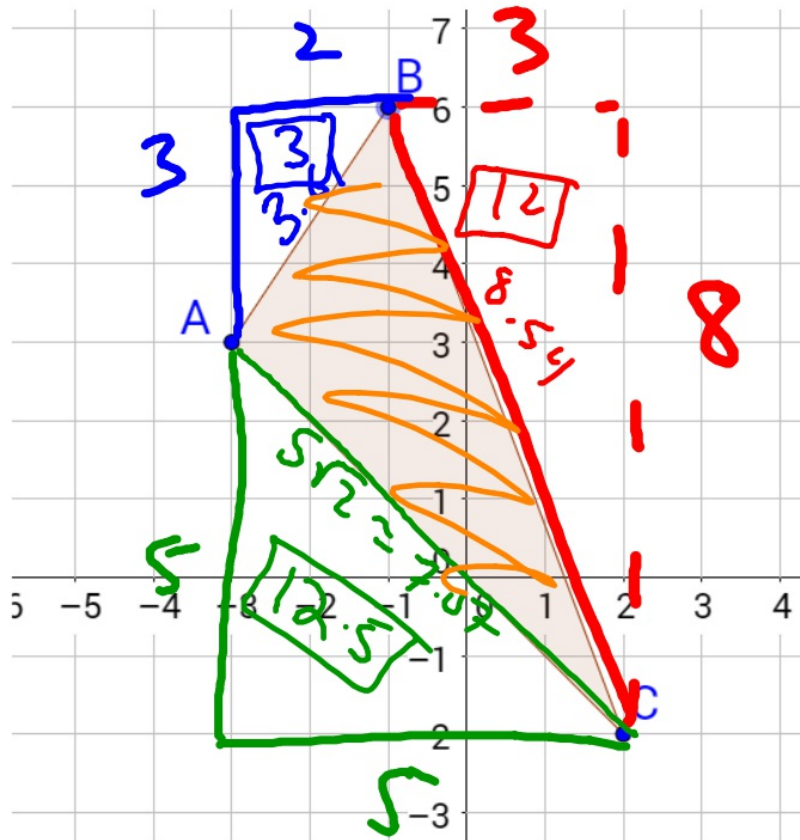


Good morning: staple warm up to notebooks.



1 Find the perimeter of $\triangle ABC$

19.2

2 Find the area of $\triangle ABC$

$$\begin{array}{r} 40 \\ - 3 \\ - 12 \\ - 12.5 \\ \hline 12.5 \end{array}$$

Reminders: Assessment is Weds.

Can reassess in DS: Mon/Thu/Fri

More Volume Practice

(this problem is on back of
'coordinate review' handout)

An ice box has dimensions $12 \times 24 \times 16$ inches. It is full of shaved ice for snow cones. Each paper cone cup has a radius of 1.5 inches and a height of 5 inches. Assuming the ice does not melt and that each cup is filled completely, about how many cups can be filled?

Private think/work time

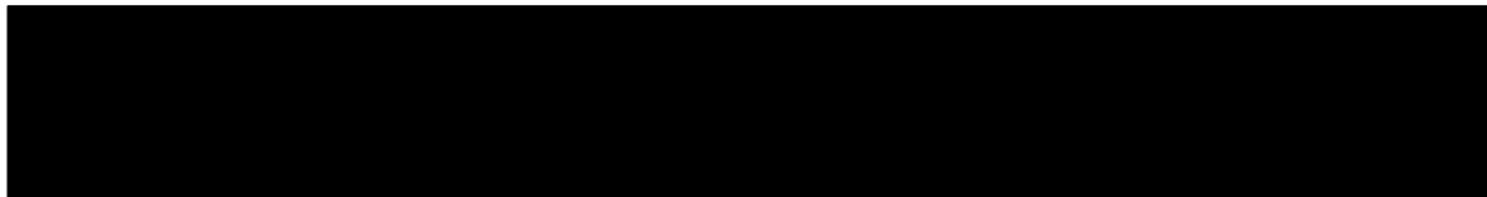
Interpret and Compare

Switch work with elbow partner, silently read over work

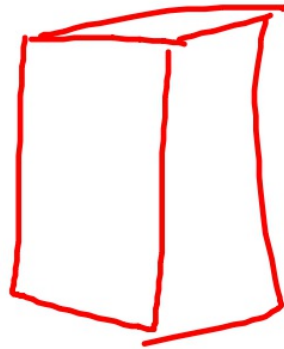
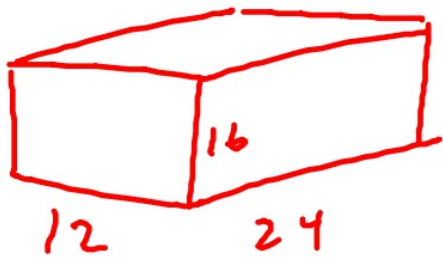
Person A describes B's reasoning, B clarifies

Person B describes A's reasoning, A clarifies

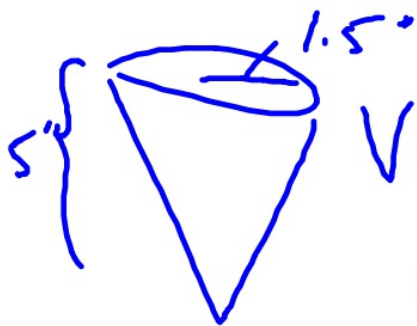
Return work, continue working if needed



An ice box has dimensions $12 \times 24 \times 16$ inches. It is full of shaved ice for snow cones. Each paper cone cup has a radius of 1.5 inches and a height of 5 inches. Assuming the ice does not melt and that each cup is filled completely, about how many cups can be filled?



$$V = 4608 \text{ in}^3$$



$$V = \frac{1}{3} \pi r^2 h$$
$$= 11.8 \text{ in}^3 / \text{cone}$$

$$\frac{4608}{11.8} \approx 391.14$$

391 cones

To provide runners with water during a race, organizers are using 5" tall cylindrical cups with diameter 2.5". The water coolers they have hold 800 cubic inches of water each. If there are 120 runners and each runner gets 2 cups of water, how many coolers will the organizers need to have?

$$V = \pi r^2 \cdot h$$

Private think/work time

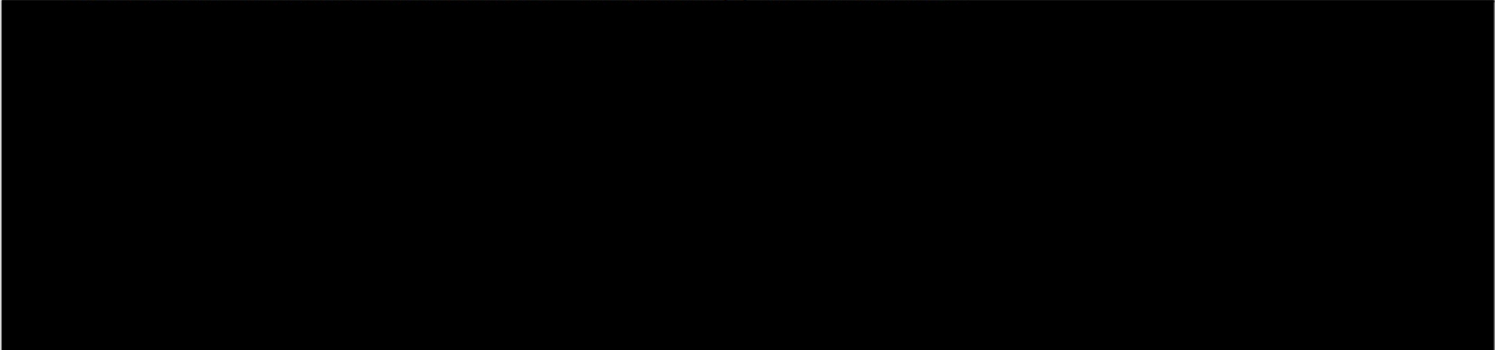
Interpret and Compare

Switch work with elbow partner, silently read over work

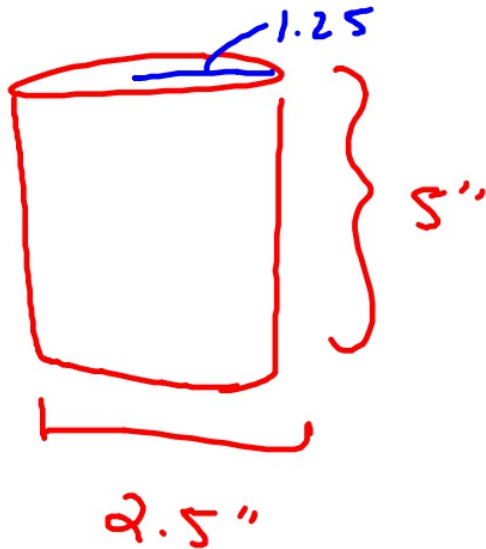
Person A describes B's reasoning, B clarifies

Person B describes A's reasoning, A clarifies

Return work, continue working if needed



To provide runners with water during a race, organizers are using 5" tall cylindrical cups with diameter 2.5". The water coolers they have hold 800 cubic inches of water each. If there are 120 runners and each runner gets 2 cups of water, how many coolers will the organizers need to have?



$$V = \pi (1.25)^2 \cdot 5$$
$$\approx 24.54 \text{ in}^3 \left. \vphantom{\frac{V}{\text{cup}}} \right\} \text{vol of 1 cup}$$

Cups needed? $120 \times 2 = 240$
cups

Water needed:

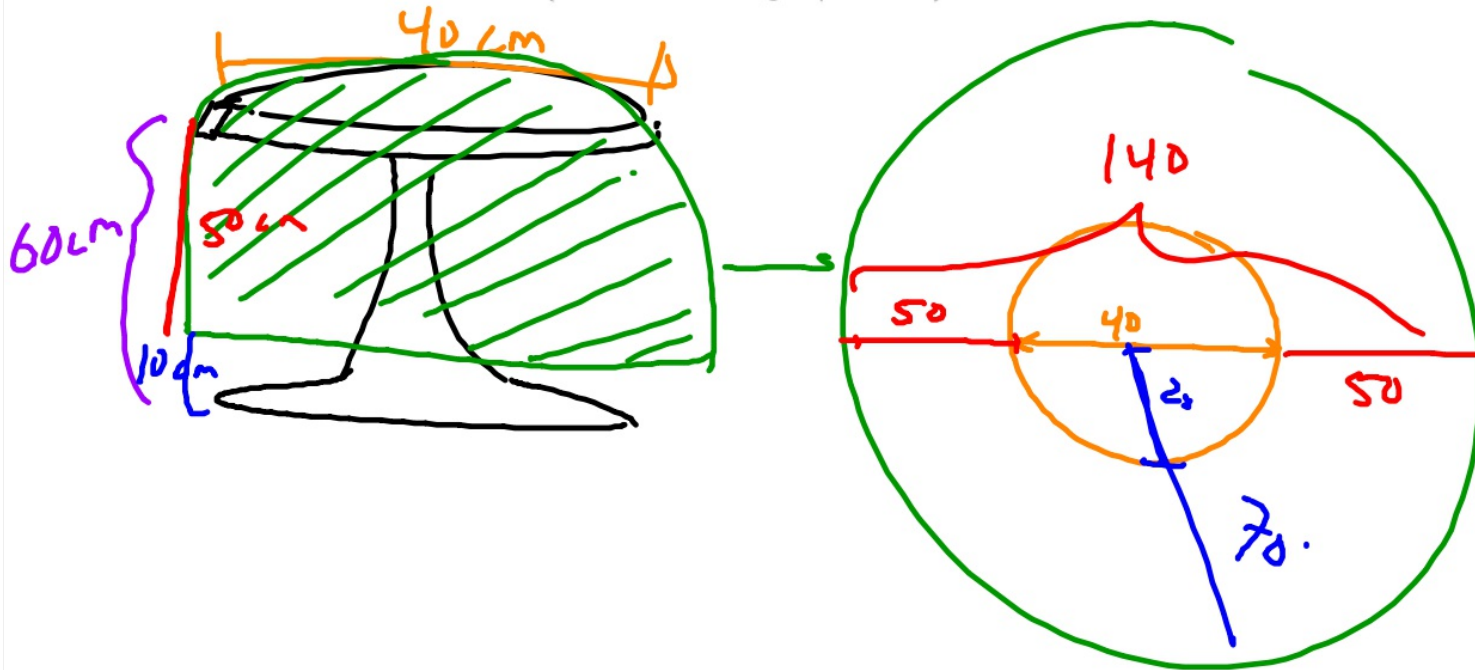
$$240 \times 24.54 = 5899.49 \text{ in}^3$$

800

7.362 coolers
 \Rightarrow 8

Alice is making a decorative table cloth for her small circular side-table. The tabletop has a diameter of 40cm and stands 60cm in height. She wants the table cloth to hang an even 10 cm above the ground.

- Does she need a rectangular or circular table cloth for this? Explain.
- What is the size (radius or ~~length/width~~) in centimeters of the tablecloth she needs?



Practice Assessment

Skills:

- explaining formulas: circumference, circle area, cone/cylinder vol
- finding volume
- applying volume
- area and perimeter on coordinate plane

Be sure you know all relevant formulas!!!

Solutions at mgeo.weebly.com