

FOLLOW UP PROBLEM #1:**One on each whiteboard.**

1. Choose **3 different** three-dimensional shapes from the bin on the side counter. Some choices:

-rectangular prism

-cylinder

-triangular prism

2. For **each shape**, calculate:

a) the **area of the base**

(how do you know which side is the base?)

b) the **volume** of the object

3. Place your objects in a row with everyone's objects, from the **smallest volume to the largest**.

How are these two solutions the same? different?

①

$$\begin{aligned} & 3.14 \times 3.25^2 \\ & = 33.2 \\ & \times 10 \\ & = 332 \end{aligned}$$

②


$$\begin{aligned} d &= 6.5 \text{ cm} \\ r &= 3.25 \text{ cm} \\ h &= 10 \text{ cm} \end{aligned}$$

$$\begin{aligned} A(\text{base}) &= \pi r^2 \\ &= 3.14 \times 3.25 \text{ cm} \times 3.25 \text{ cm} \\ &= 3.14 \times 10.6 \text{ cm}^2 \\ &= 33.2 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} V &= A(\text{base}) \times h \\ &= 33.2 \text{ cm}^2 \\ & \times 10 \text{ cm} \end{aligned}$$

$$V = 332 \text{ cm}^3$$

Firewood Frenzy

 <https://youtu.be/WnAMCcCHVjE>

Watch the video. While you're watching, write on your whiteboard:

I notice...

I wonder...






A cord is the amount of wood that, when "ranked and well stowed" (arranged so pieces are aligned, parallel, touching and compact), occupies a volume of 128 cubic feet (3.62 m^3).[\[1\]](#)

This corresponds to a well-stacked woodpile 4 feet (122 cm) high, 8 feet (244 cm) long, and 4 feet (122 cm) deep; or any other arrangement of linear measurements that yields the same volume.

Wikipedia

You Pour, I Choose

 <http://www.101qs.com/136-you-pour-i-choose>

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