

Good afternoon: Warm up in notebooks

If $\sin \Theta = \frac{o}{h}$ and $\cos \Theta = \frac{a}{h}$, then what is $\frac{\sin \Theta}{\cos \Theta}$?

$$\frac{\sin \Theta}{\cos \Theta} = \frac{\frac{o}{h}}{\frac{a}{h}} \rightarrow \frac{o \div h}{a \div h} = \frac{o}{a} = \boxed{\tan \Theta}$$

Simplify your answer.

$$\frac{o}{h} \cdot \frac{h}{a} = \frac{o \cdot h}{a \cdot h} = \frac{o}{a}$$

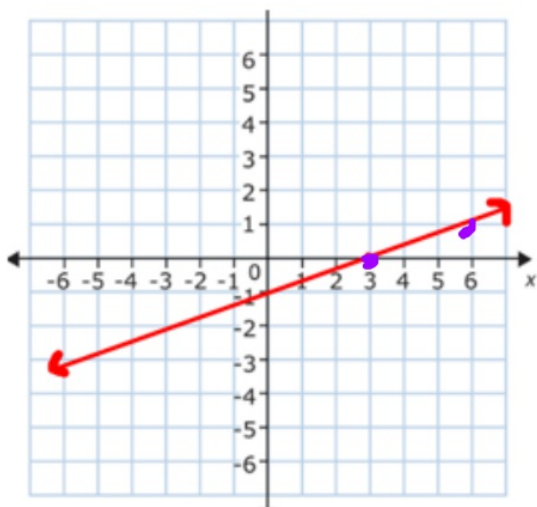
Reminder: can reassess in Friday DS

Next assessment: Monday 2/13

Assessments

Coordinate Geometry Review Answers

5.



Remember: $y = mx + b$

m is the slope only when solved for y

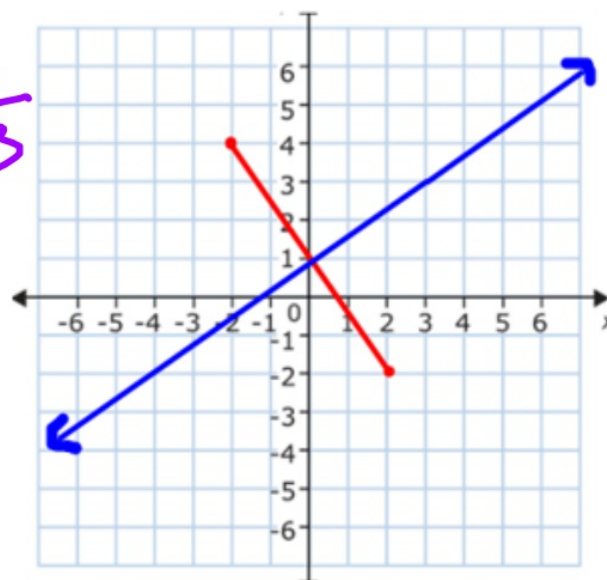
$$-\frac{1}{3}x = y + 2 \Rightarrow y = \frac{1}{3}x + 2$$

7. $y - 4 = -\frac{3}{2}(x + 1)$

$$y - y_1 = m(x - x_1)$$

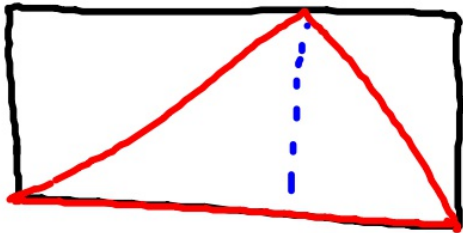
6.

$-\frac{3}{2} \perp \frac{2}{3}$



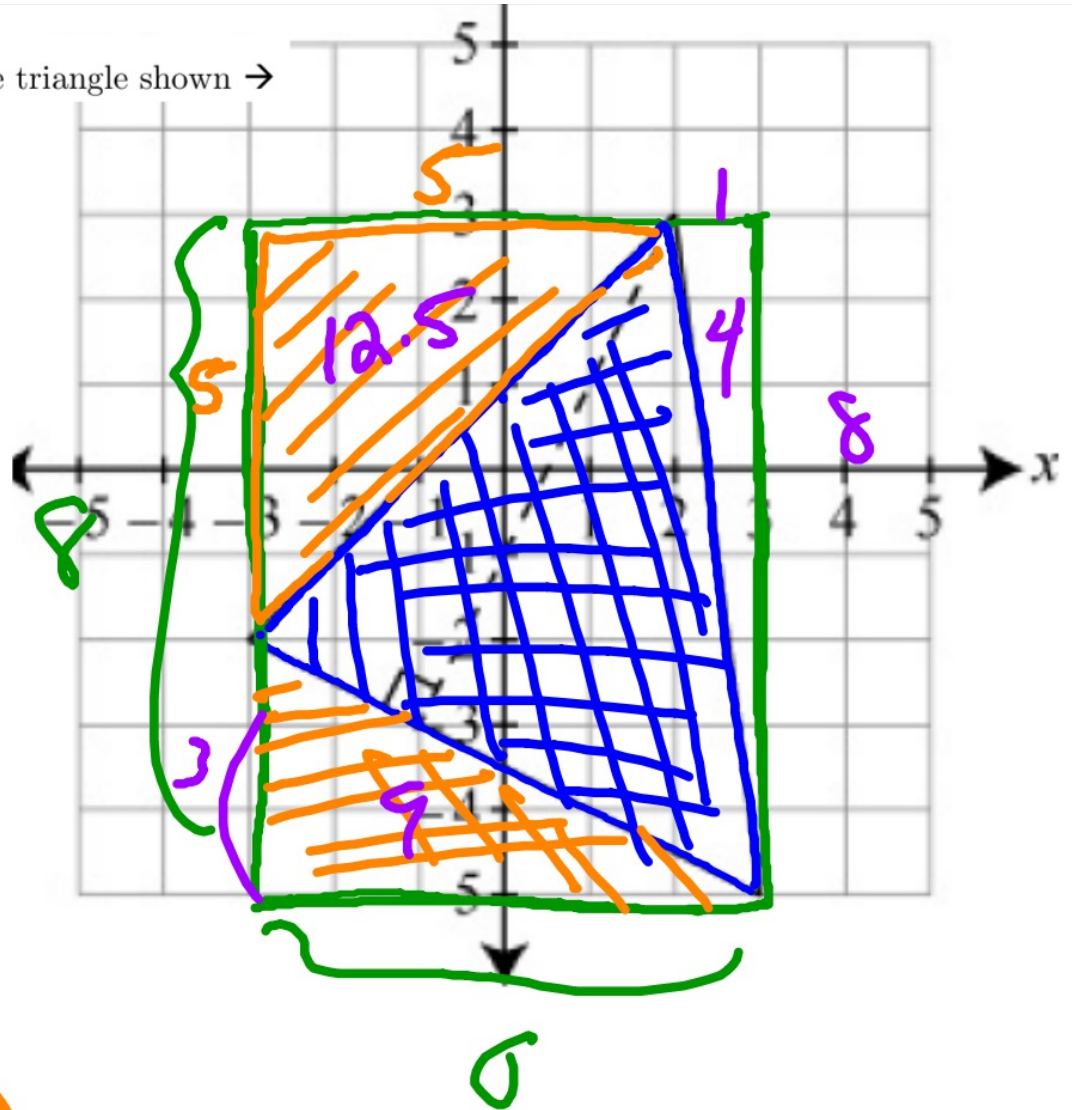
8. Rhombus but not a square

4. Find the area, to the nearest tenth, of the triangle shown →



$$A = \frac{1}{2} \cdot b \cdot h$$

$$\begin{array}{r}
 48 \\
 - 12.5 \\
 - 9 \\
 - 4 \\
 \hline
 22.5
 \end{array}$$



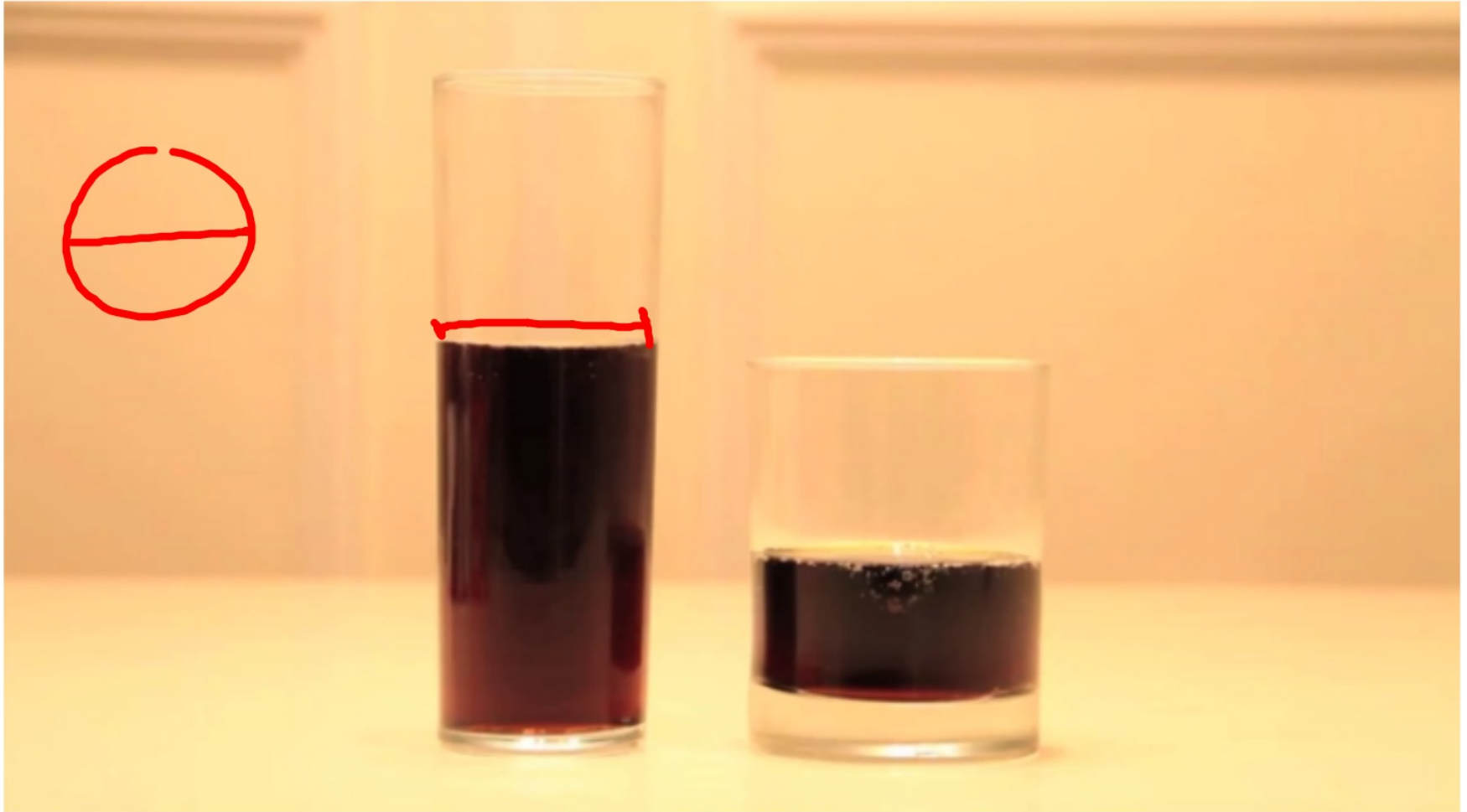
What's the first question that comes to your mind?



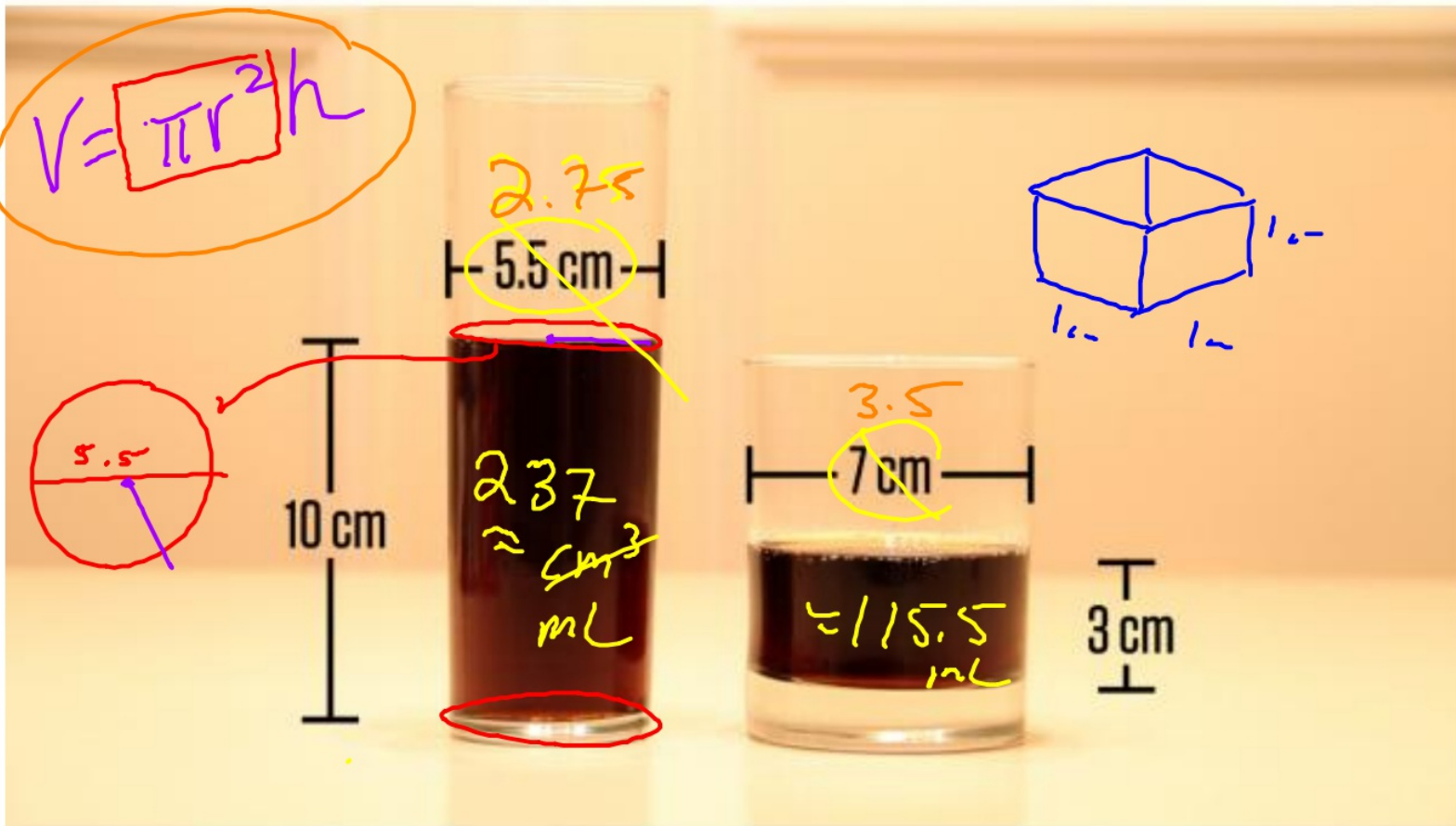
Write down your guess: which one has more soda



What information do you need?



Which one holds more soda?



Explaining Area/Volume Formulas GMD-1a: I can give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.

Date					
Score					

Coordinate Geometry Review 1 GPE-B1: Given 4 coordinate pairs. I can prove/disprove that a shape is a

Pay close attention and take good notes today!!

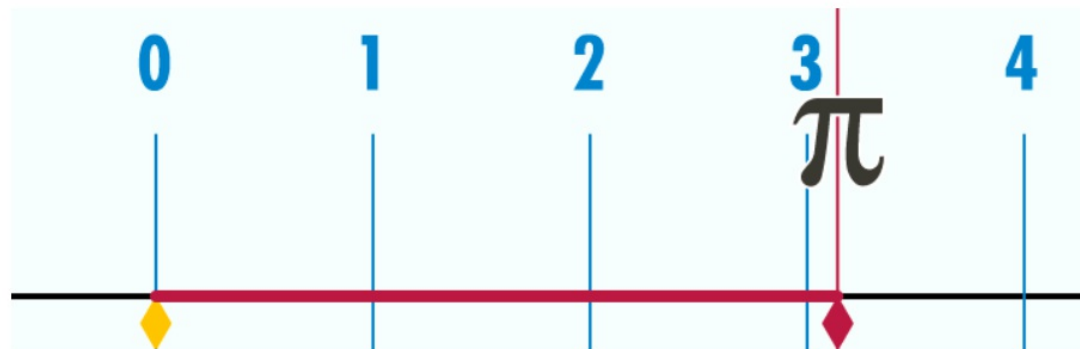
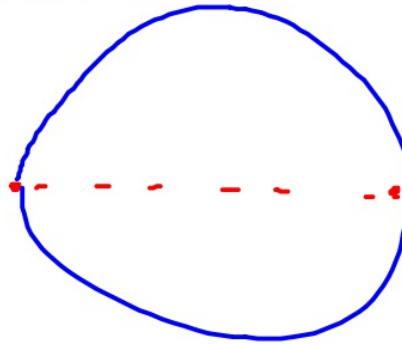
Why is the circumference of a circle $2\pi r$?

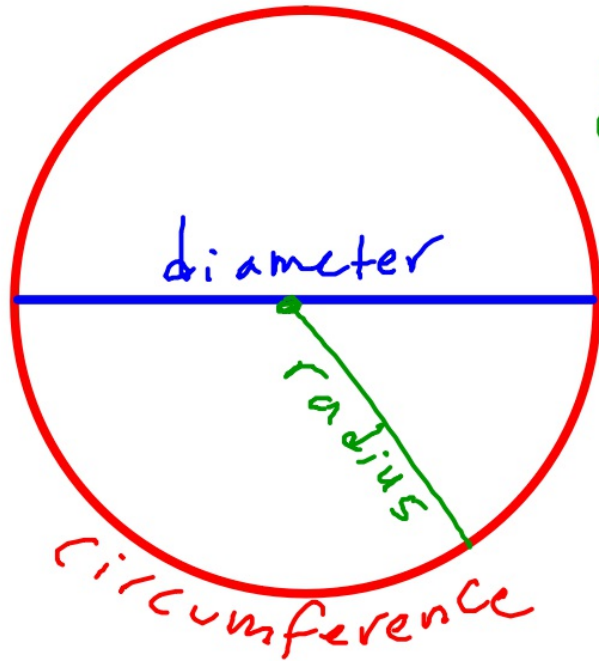
NOTES

Why is the area of a circle πr^2 ?

What is π ?

$$\pi = \frac{\text{Circumf.}}{\text{diameter}}$$





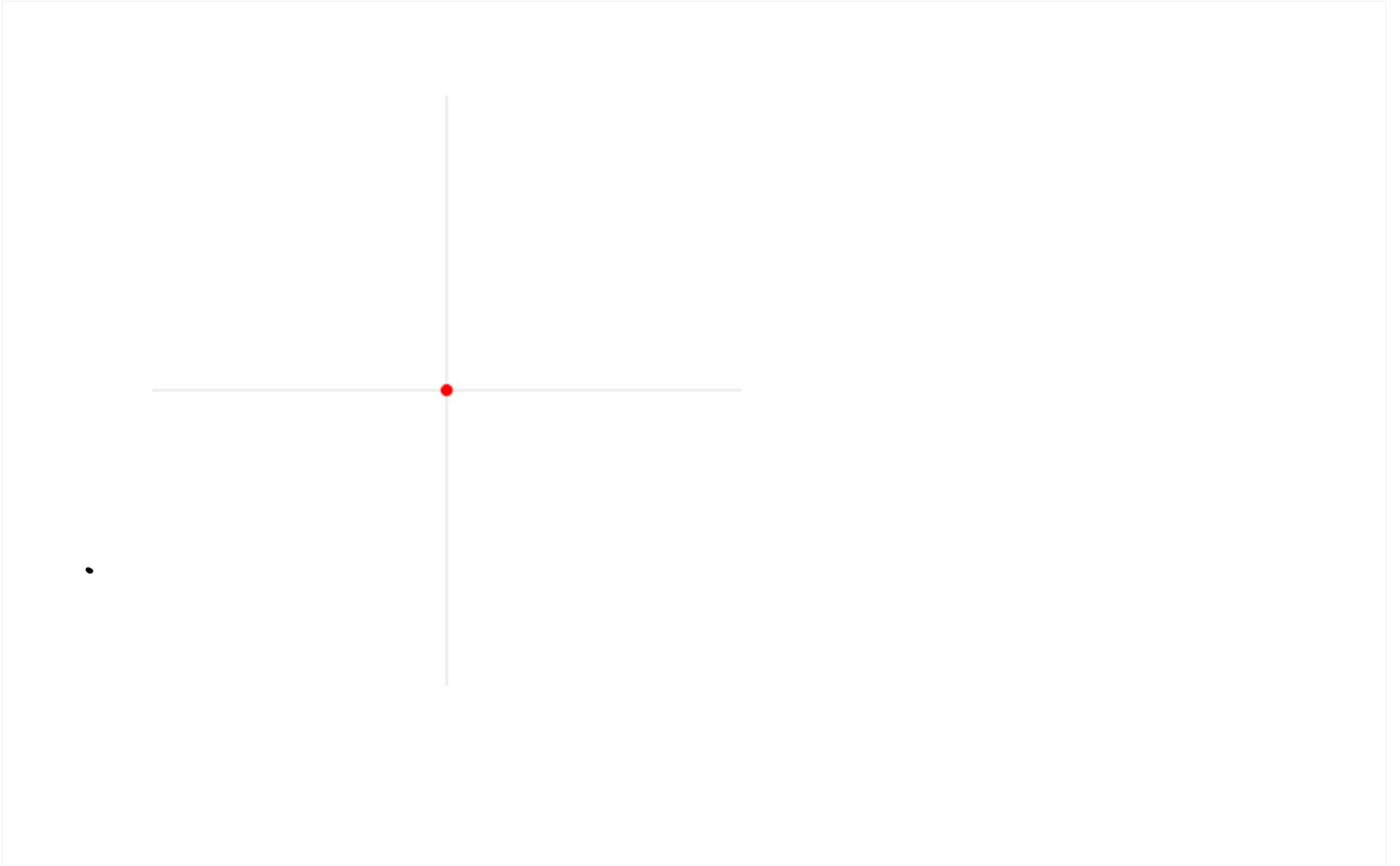
$$2r = D$$

$$\pi = \frac{\text{circumference}}{\text{diameter}}$$

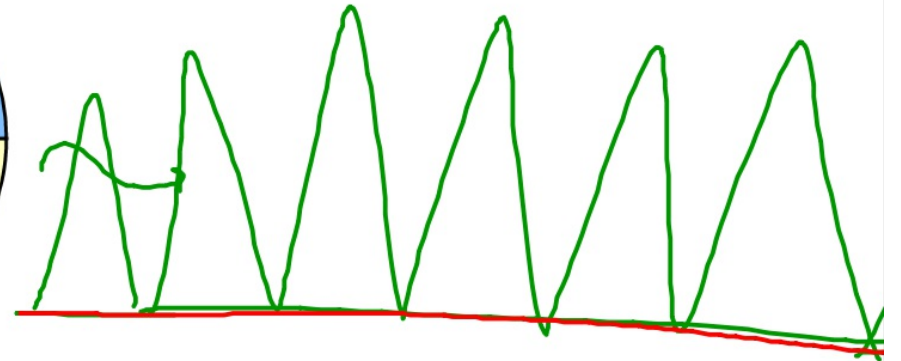
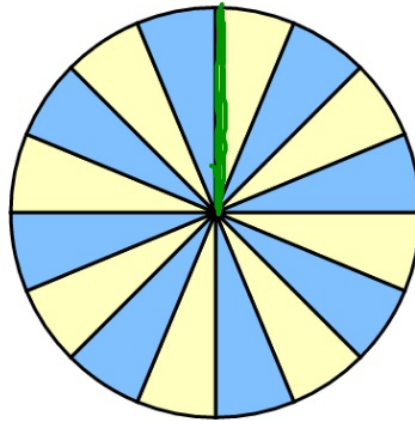
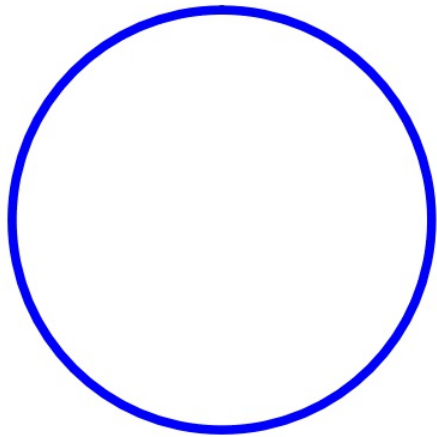
$$2r \left(\pi = \frac{C}{2r} \right) \cdot 2r$$

$$2r \pi = C$$

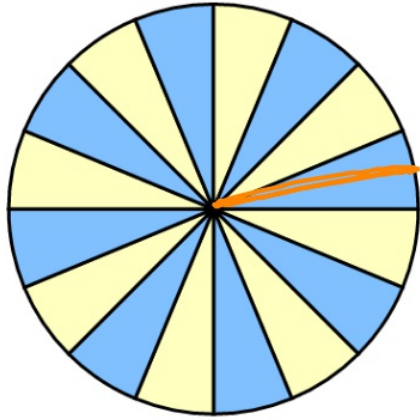
$$\underline{2\pi \cdot r = C}$$



Okay...but area?? πr^2 ??

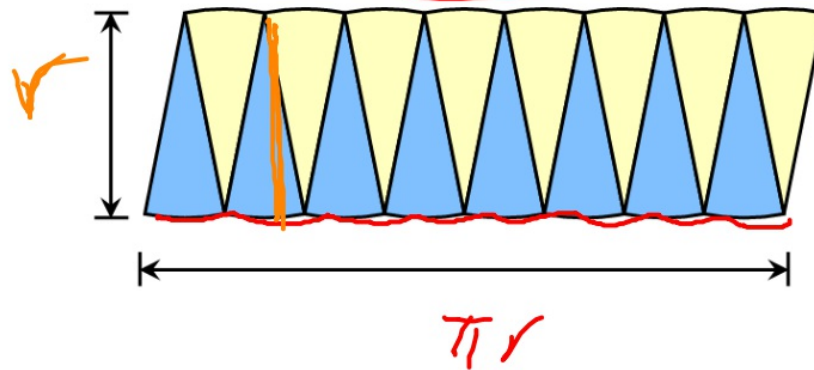


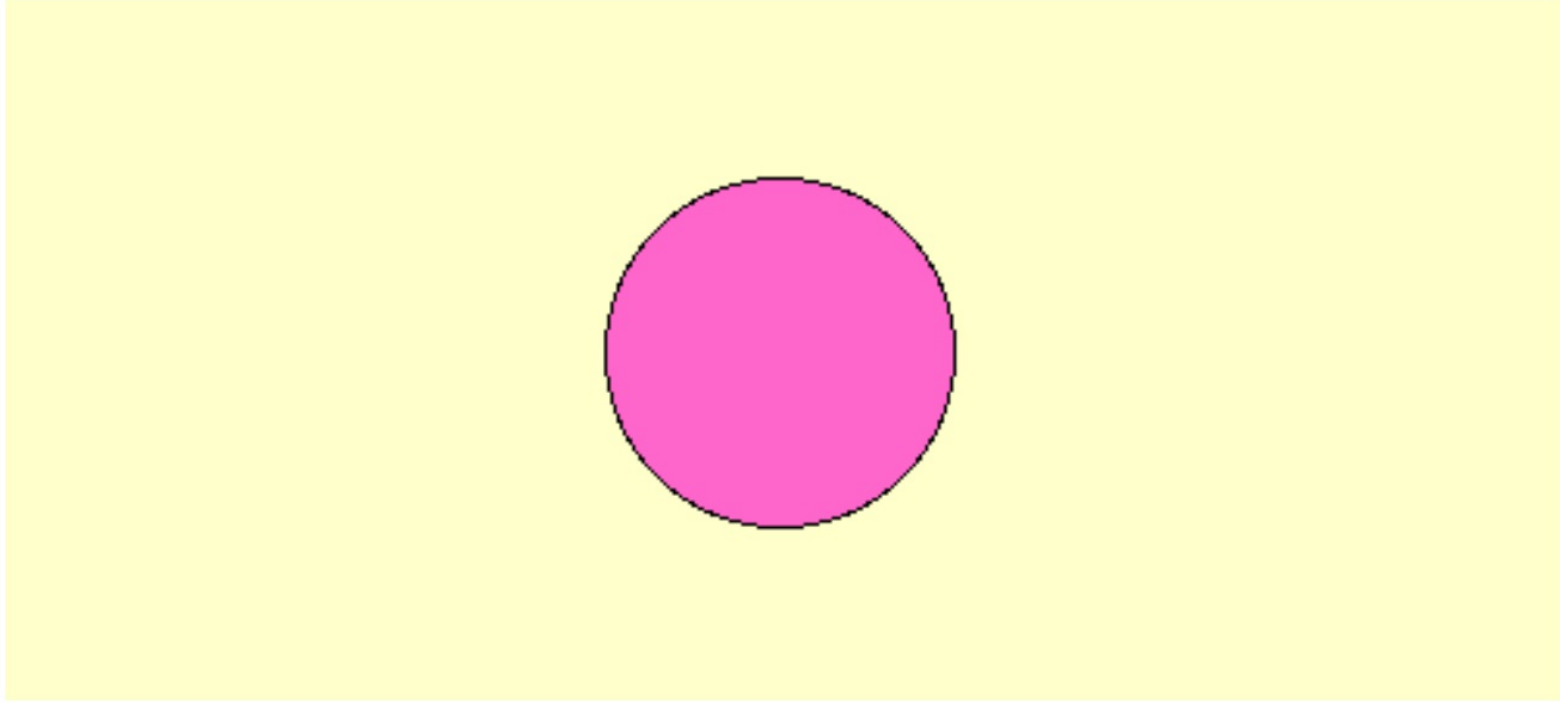
<https://www.youtube.com/watch?v=lZa312pEcTw>



$$A = B \cdot H = \pi r \cdot r \\ = \pi r^2$$

$$\frac{1}{2} \cdot 2\pi r \\ = \pi r$$

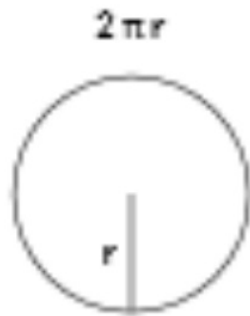




<https://www.youtube.com/watch?v=YokKp3pwVFc>

Another approach....

$$\frac{\cancel{\frac{1}{2}} \cdot \cancel{2} \cdot \pi r \cdot r}{\pi r^2}$$





<https://youtu.be/whYqhpc6S6g>

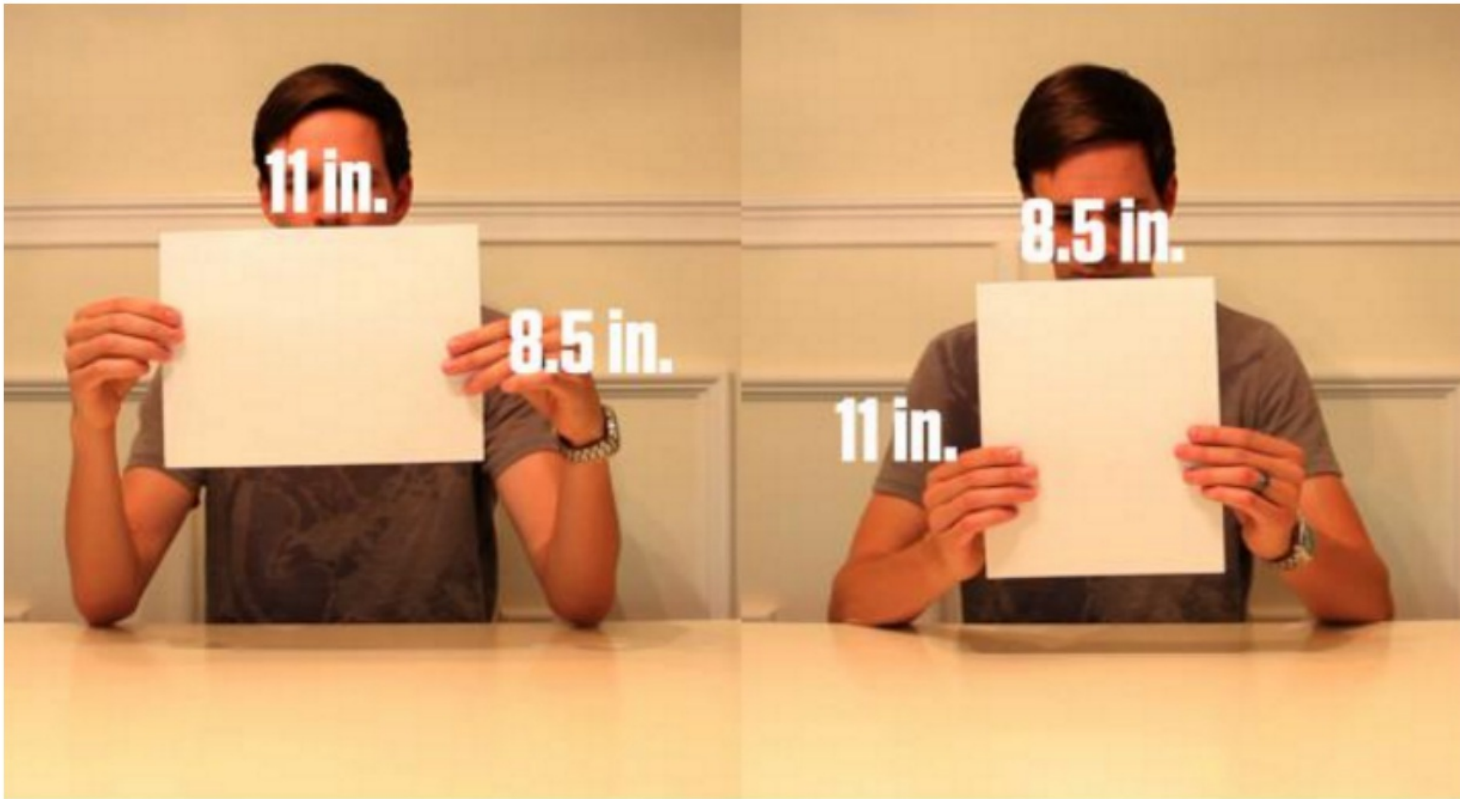
Which one holds more popcorn? Write down your guess



Wide

Tall

Which tube holds more popcorn? $V = \pi r^2 \cdot h$



wide

tall

Homework:

p 475 #1-6, 11