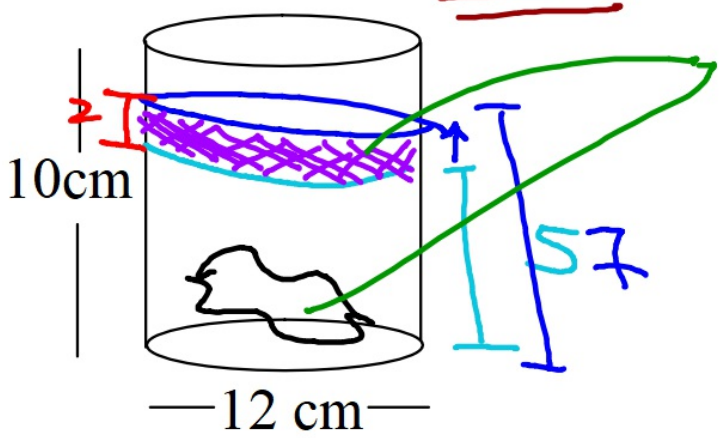
Good morning: warm up

An object is submerged in the cylinder below. The water level is at 5cm before submersion, and is 7cm after. If the density of the object is known to be $5g/cm^3$,find the object's mass.



$V = \pi(6)^2 \cdot 2$

$72\pi \approx 226\ cm^3$

$\times\ 5\ g/cm^3$

1131 g

1.131 kg

Last day to retake Q3 grades: March 13

Formulas Quiz Monday Assessment Tuesday

visibly random grouping

HW p522

9 B

10 5x5 ft

11 3870.72 lb

12 C

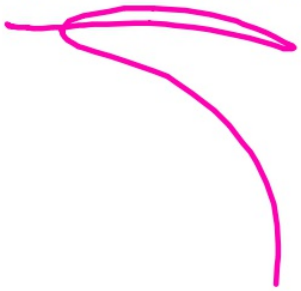
13 3.54kg

14 1426.3kg

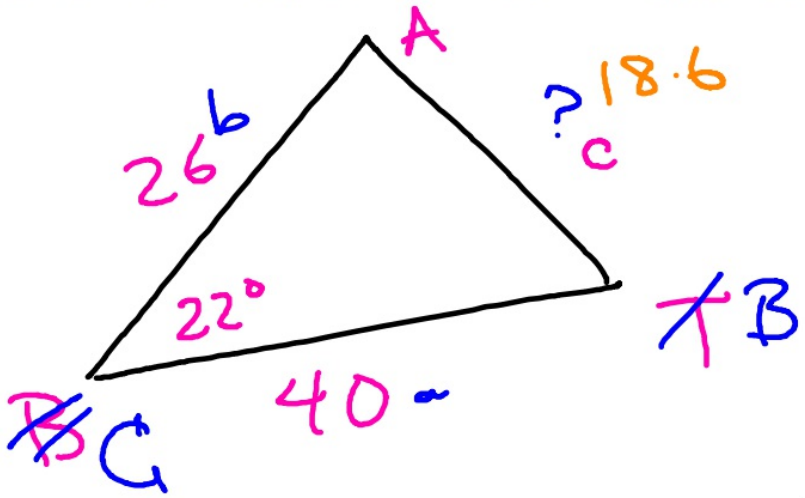
What's on Tuesday's test

new skills
MG-A1a: Using volume/SA in problem solving: cone, cyl, sphere, prism, pryamid
MG-A2: Density: mass/volume and population

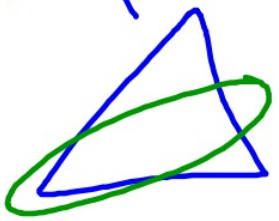
old skills
GMD-A2a: Finding volume/SA: cone, cyl, sphere, prism, pryamid
SRT-C8b: Law of Sines/Cosines



Law of Sines/Cosines Practice



Use L.O.S. if possible



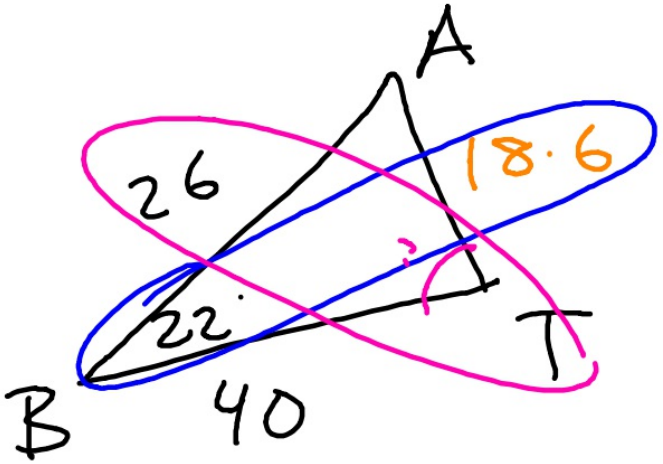
can't....

$$c^2 = b^2 + a^2 - 2ab\cos C$$

$$c^2 = 26^2 + 40^2 - 2(40)(26)\cos(22^\circ)$$

$$c^2 = 347.457$$

$$c \approx 18.6$$



$$\frac{22}{18.6} = \frac{T}{26}$$

$$\frac{\sin 18.6}{22} = \frac{\sin 26}{T}$$

$$\frac{\sin 22}{18.6} = \frac{\sin T}{26}$$

$$\frac{18.6 \cdot \sin T}{18.6} = \frac{9.739}{18.6}$$

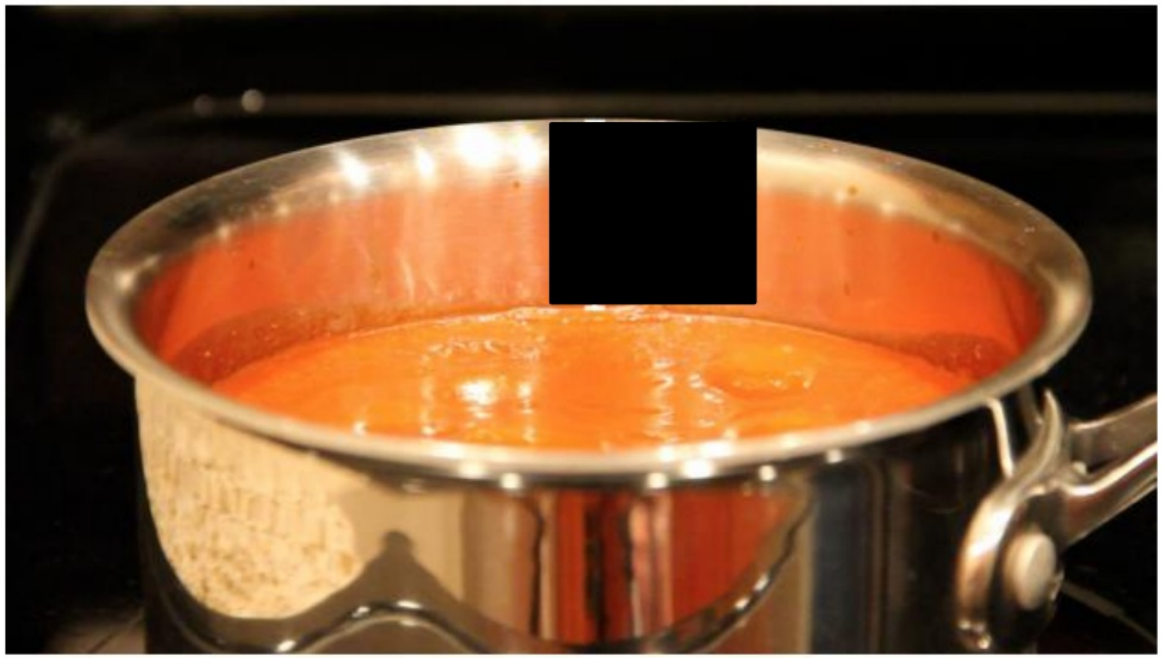
$$\sin T = 0.524$$

$$\sin^{-1}(0.524) = T$$

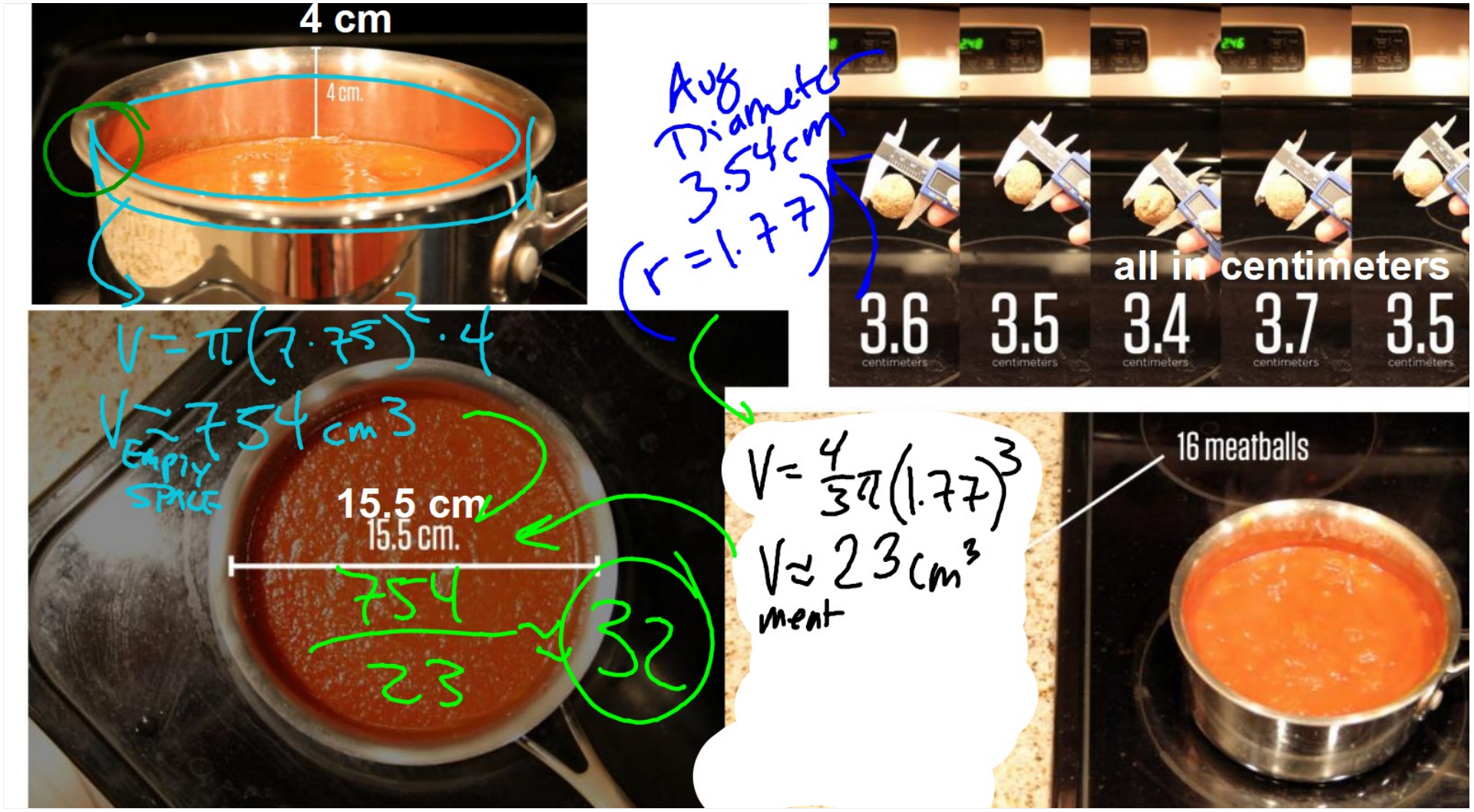
$$T \approx 31.6°$$

What's the first question that comes to mind?

How many meatballs will fit in the pot? Write down your guess.



What information is needed to solve this problem??

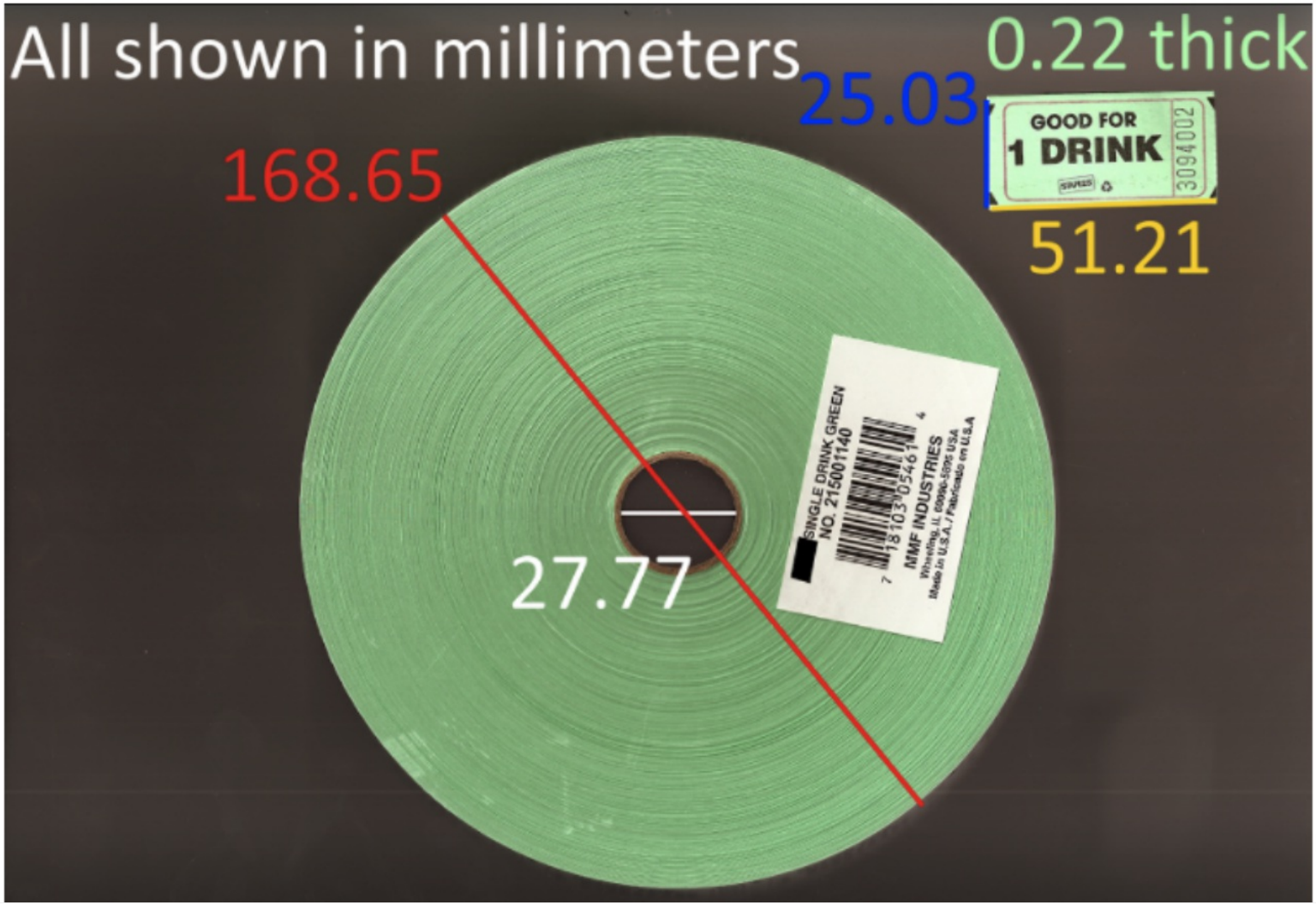

4 cm
4 cm.
Avg Diameter 3.54cm
(r = 1.77)
all in centimeters
3.6 centimeters
3.5 centimeters
3.4 centimeters
3.7 centimeters
3.5 centimeters
V = π(7.75)² · 4
V ≈ 754 cm³
Empty space
15.5 cm
15.5 cm.
754 / 23
32
V = 4/3 π(1.77)³
V ≈ 23 cm³
meat
16 meatballs

What's the first question that comes to mind?

What are the first questions that come to mind?

How many tickets are on the roll? Record your guess.

What do you need to know to answer this question?


All shown in millimeters
0.22 thick
25.03
168.65
GOOD FOR
1 DRINK
3094002
51.21
27.77
SINGLE DRINK GREEN
NO. 215001140
NMF INDUSTRIES


SINGLE DRINK GREEN
NO. 215001140
7 18103 05461 4
MMF INDUSTRIES
Wheeling, IL 60090-5895 USA
Made in U.S.A. / Fabricado en U.S.A