HOMEWORK ???

6.3 - Build Your Skills Solutions.pdf

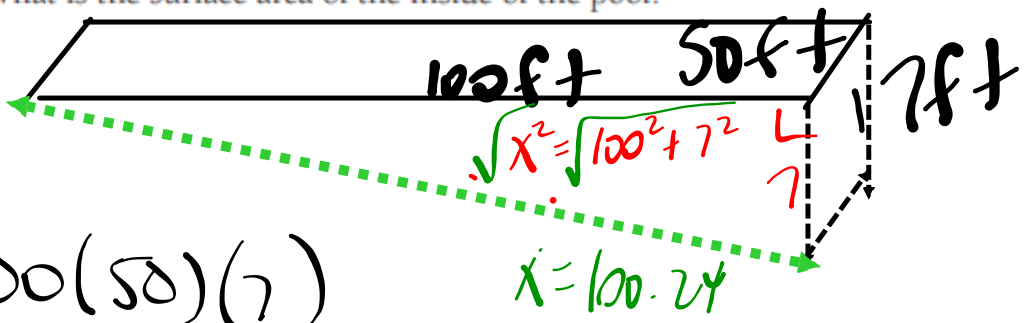
6.4 - Build Your Skills Solutions.pdf

1. A community swimming pool is 100 feet long and 50 feet wide. It is 7 feet deep at the deep end and has a beach entry (0 feet deep) at the shallow end. The bottom of the pool has a constant slope.

   a) Sketch the shape of the pool and label the dimensions.

   b) What is the water capacity of the pool in cubic feet and in US gallons? Remember that one cubic foot equals 7.48 US gallons.

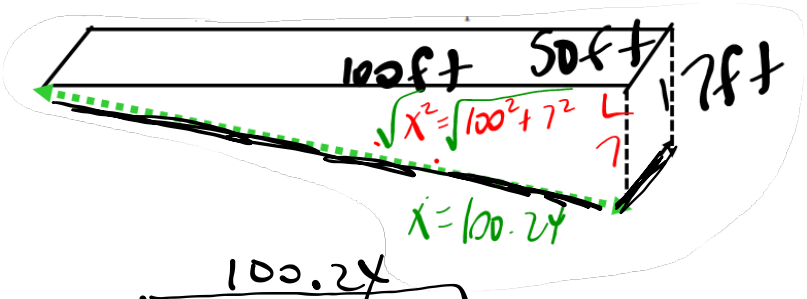
   c) What is the surface area of the inside of the pool?

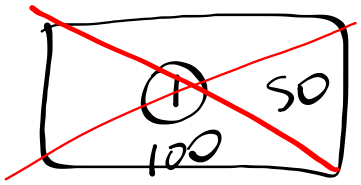


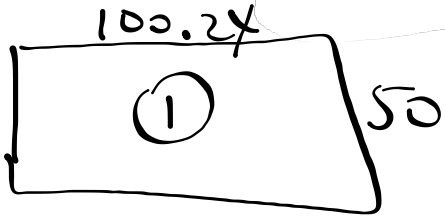
$$V = \frac{100(50)(7)}{2}$$

$$V = 17500\ ft^3 \times \frac{7.48\ US\ gal}{1\ ft^3}$$

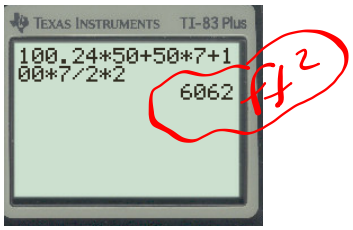
$$V = 130\,900\ US\ gal$$

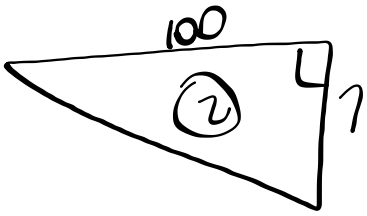

100ft
50ft
7ft
$\sqrt{x^2} = \sqrt{100^2 + 7^2}$
4
7
$x = 100.24$


1
50
100


100.24
1
50


50
1
7


TEXAS INSTRUMENTS TI-83 Plus
100.24*50+50*7+1
00*7/2*2
6062
ft²


100
2
4
7

3. A bakery stores flour in a cylindrical bin 70 cm high and with a diameter of 50 cm.

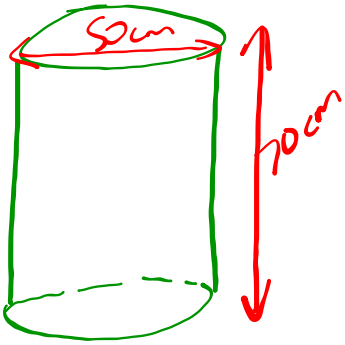
   a) What volume of flour does the bin hold?

   b) The bakery orders flour in 20-kg sacks. Each sack is approximately 46 cm wide, 80 cm long, and 15 cm thick. How many sacks of flour fit in the bin?

   c) How many kilograms of flour does the bin hold?

   d) The bakery stores salt in a bin that has one half the height and one half the diameter. Using your answer from part a) and proportional reasoning for volume, what is the volume of salt in the bin?

Bakers must store all of their dry goods, such as flour, dried fruit, and spices, in airtight containers to prevent spoilage.



a) $V = \pi(25)^2(70)$

$V = 137444.7\,cm^3$

b) $V = 46(80)(15)$

$V = 55200\,cm^3$

$\#\text{ of bags} = \frac{137444.7}{55200}$

$= 2.5$ bags

c) $2.5 \times 20kg$

$50\,kg$

d) $V = \pi(12.5)^2(35)$

bin

$V = 17180.6\,cm^3$ Salt

READY FOR THE TEST TUESDAY?
Quiz TOMORROW!!!

- Page 268: #1 - 10

Chapter 6 Surface Area, Volume, and Capacity, Practice Your New Skills.pdf

- Sample Test

Chapter 6 Sample Test.pdf

Chapter 6 Sample Test Answers.pdf

6.3 - Build Your Skills Solutions.pdf

6.4 - Build Your Skills Solutions.pdf

Chapter 6 Sample Test Answers.pdf

Chapter 6 Sample Test.pdf

Chapter 6 Surface Area, Volume, and Capacity, Practice Your New Skills.pdf