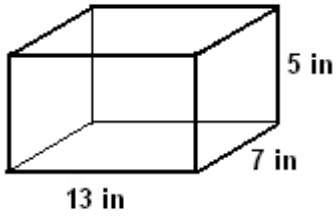


**Advanced Geometry**  
**More with Volume**

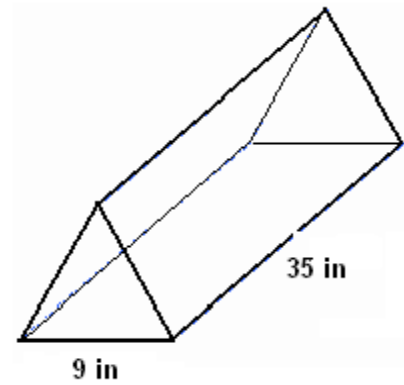
Name: \_\_\_\_\_

Find the volume of each of the following...

1.) (Rectangles)



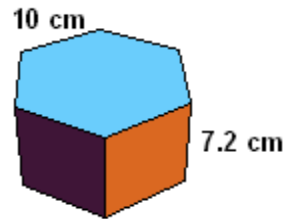
2.) (Equilateral Triangles forming a prism)



3.) (Regular Polygons)

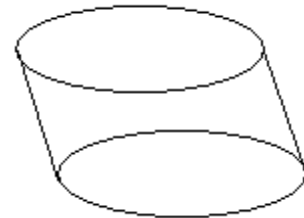


4.) (Regular Polygons)

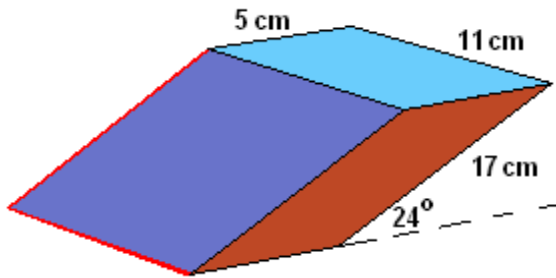


5.) (Oblique Cylinder)

Diameter: 18 cm  
Vertical Height: 4 cm



- 7.) "Parallelepiped"  
 (All Parallelograms for lateral faces ... rectangles on top and bottom as bases .. use Trig for height)



- 8.) Given the Swimming Pool to the right, complete the following:

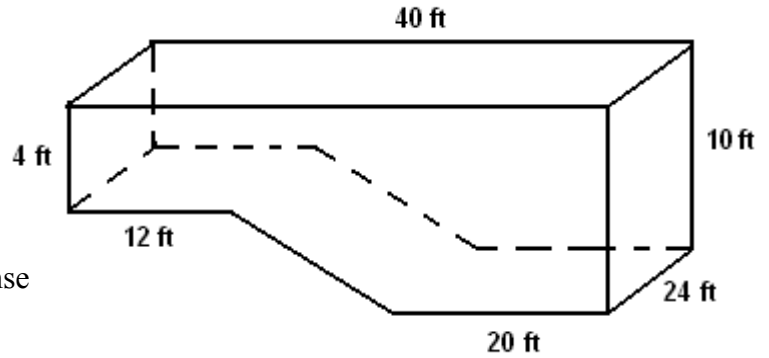
(A) Find the volume of the pool in cubic feet. (Chunk it up!)

(B) Suppose you set up three hoses that dispense water at 3 gallons per minute each.

If 1 cubic foot = 7.481 gallons of water, and you started filling the pool at 3:00 PM Monday, at what time would the pool be full?

(C) Find the surface area of the sides and bottom of the pool combined.

(D) Suppose you want to paint the sides and bottom of the pool. If one gallon of paint covers 425 square feet, and paint costs \$16.50 per gallon (with tax), how much would you have to spend?



*\*\* Note: All faces of the pool are rectangular and are all perpendicular to each other.*