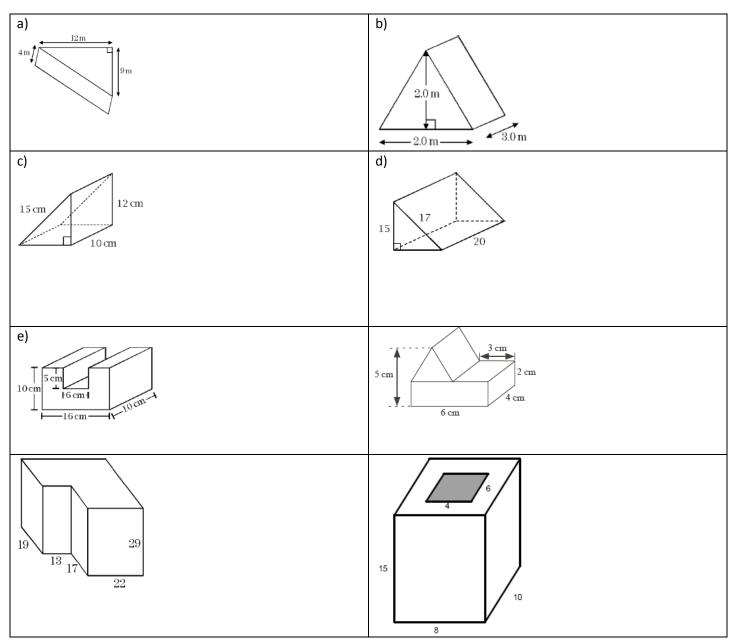
HW Math 8 Section 9.2 Volume of Rectangular and Triangular Prisms

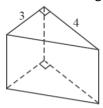
1. Given each cylinder, find the volume:



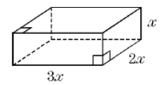
2. If the volume of a cube is Ncm^3 and the surface area is Ncm^2 , then what is the value of "N"?

3. If each face of a cube has a perimeter of 12 centimeters, what is the volume of the cube, in cubic centimeters?

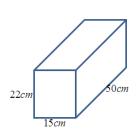
4. A triangular prism has a volume of 120cm³. Two edges of the triangular faces measures 3cm and 4cm as shown. What is the height of the prism?

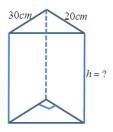


5. If the volume of the box below is $162cm^3$, then what is the value of "x"?



6. If the two shapes have the same volume, then what is the height of the 2nd prism?





7. A water tank in the shape of a rectangular prism [20cm wide, 85cm long, and 55cm high] is 75% filled with water. What is the depth of the water? If a solid block measuring 20cm by 20cm by 20cm is placed inside this tank, what will the depth of the water be then?

8. A container in the shape of a cube has edge length 20cm and contains some water. A solid gold cube, with edge length 15cm, sinks to the bottom of this container, causing the water level to rise just to the top of the solid cube. Which of the following is closest to the original depth of the water?

A) 6.56 B) 8.25 C) 10.50 D) 5.31 E) 7.50

