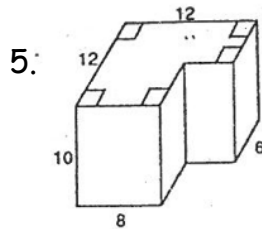
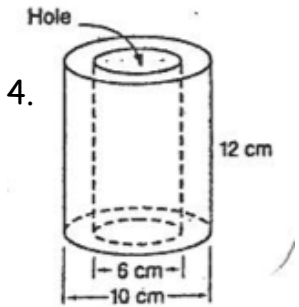
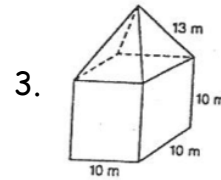
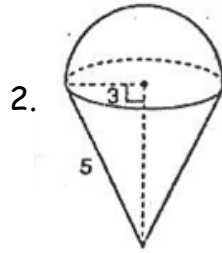
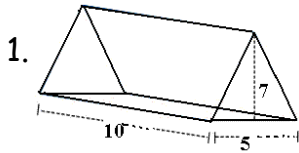
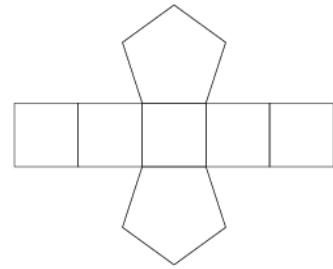


Use these volume problems to prepare for your check-up, your inspection, your assessment, your **quiz tomorrow**. Solutions are also on Moodle.

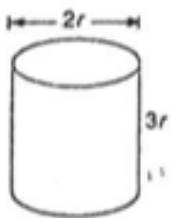
#1-6, Find the volume of each solid.



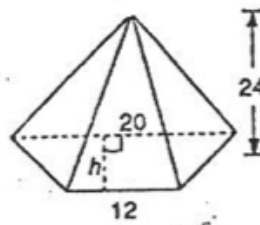
6. The solid formed by this net:



7. Find volume in terms of r .



8. Find h .
 $V = 896 \text{ cm}^3$

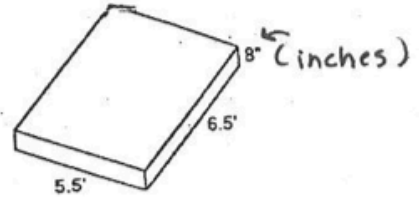


9. Dr. Nagoonik is calculating the volume of the pig heart he plans to transplant into a patient. He places the heart in a $10\text{cm} \times 16 \text{ cm} \times 12\text{cm}$ high tank. The tank holds water up to a height of 10.6 cm . When the doctor places the heart in the tank the water rises to 11.3 cm . Find the volume of the pig heart.

10. A 10 cm tall cylindrical glass is 8 cm in diameter and filled to *one centimeter* from the top with water. If a golf ball 4 cm in diameter is placed into the glass, will it overflow? Show your work to defend your answer.

- 11.
- Water weighs about 63 pounds per cubic foot.
 - A cubic foot of water is about 7.5 gallons

The diagram to right represents a king size waterbed.
How much does the waterbed weigh?



A round waterbed mattress is diagrammed at right.
About how many gallons of water do you need to fill the waterbed?

