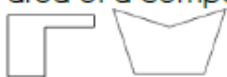


Math 6 – Unit 5: Area & Volume Review

Knowledge & Understanding

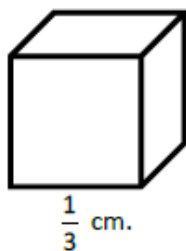
- 1) How could you determine the area of a composite figure, such as the ones shown here?



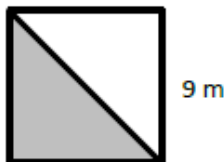
- 2) What types of units are used to describe area? _____
- 3) What types of units are used to describe volume? _____

Proficiency of Skills

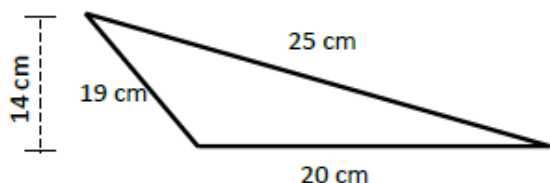
- 4) Determine the volume of the cube: _____



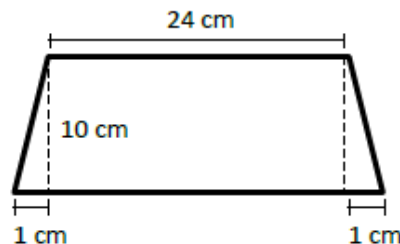
- 5) Find the area of the shaded section of the square: _____



- 6) Find the area of the triangle: _____

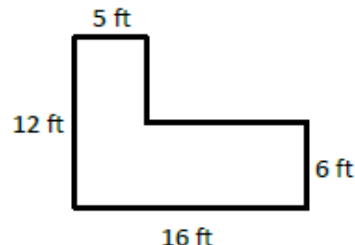


- 7) Determine the area of the trapezoid: _____



- 8) The surface area of a cube can be found by using the formula $SA = 6s^2$. Determine the surface area of a cube with a length of 8cm.

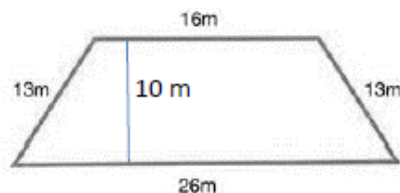
- 9) Find the area of the figure shown below: _____



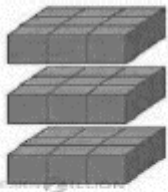
Application

- 10) If carpet costs \$4 per square yard, how much would it cost to carpet a rectangular room that is 6 yards wide and 10 yards long? _____

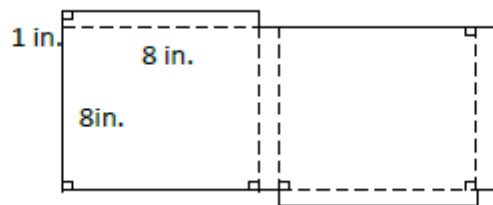
- 11) What is the area of the trapezoid? _____



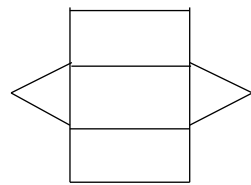
- 12) A rectangular prism is filled with small cubes of the same size. The bottom layer consists of 9 cubes, each with a volume of 2 cubic inches. If there are 3 layers of cubes in the prism, what is the volume of the rectangular prism? _____



- 13) A box is made of cardboard with no overlap. The net of the box is shown below. How many square inches of cardboard is needed to make the box? _____



- 14) The triangular sides of the tent are equilateral, with a base of 20 inches and a height of 15 inches. The three rectangular sides of the tent are each 50 inches long and 20 inches wide. What is the surface area of the tent? _____

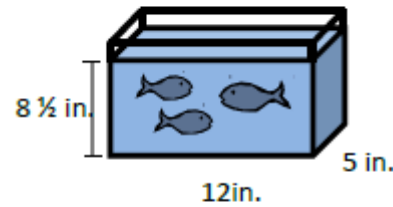


- 15) Mariah and Max are making a plaque to dedicate to the swaggerific saxophone players of the ECMS sixth-grade band. The center is a 10-inch square, and the edges of the frame measure 12 inches long and 12 inches wide. What is the area of the frame? _____



12 ft

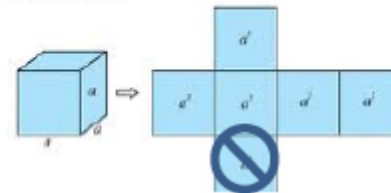
- 16) A fish tank is shown below. What is the volume of the water in the tank? _____



- 17) How many cubic feet are in a cubic yard? _____

- 18) The volume of a rectangular prism can be found by using the formula $V=Bh$. If the base of a prism is square with a side length of 3 inches and the height of the prism is $2\frac{1}{4}$ inches, find the volume of the prism. _____

- 19) Andres is painting five faces of a storage cube (he isn't painting the bottom face). If each faces is 8 inches, how many square inches will he need to paint? _____



- 20) Which of the following nets could NOT be folded to form a cube?

