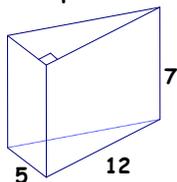


Volume and Surface Area of Prisms

~ 1 ~

1. What is the surface area of the right triangular prism?



- A. 210 units² B. 240 units²
C. 270 units² D. 330 units²

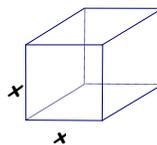
2. What is the volume of the box with dimensions of 6 ft x 4 ft x 1 ft?

- A. 24 ft³ B. 25 ft³
C. 48 ft³ D. 576 ft³

3. Hal needs to paint a rectangular box for a science fair. The dimensions of the box are 10 ft x 12 ft x 8 ft. He is going to be painting all four walls of the box. If each can of paint holds enough to cover 100 ft² then how many cans of paint will he have to buy to cover the walls?

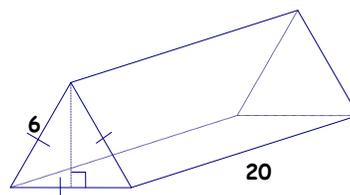
4. Find the surface area of a regular hexagonal prism if the area of the base is 30 cm², the edge of the base is 4 cm, and the height of the prism is 8 cm.

5. The figure below is a cube with a surface area of 294 in².



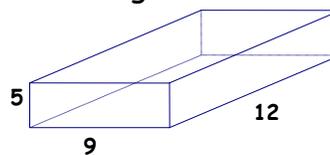
What is the measurement of one side of the cube?

6. What is the exact surface area of the right prism below?



The bases are equilateral triangles.

7. What is the lateral area of the below figure if the bases have dimensions of 9 ft x 12 ft? The height is 5 ft.

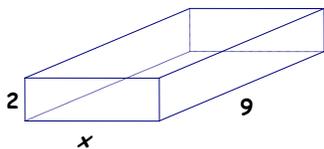


8. What is the volume of an aquarium with dimensions of 8 ft x 3 ft x 4 ft?

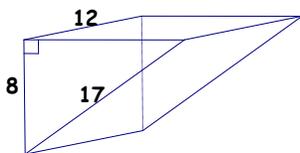
Volume and Surface Area of Prisms

~ 2 ~

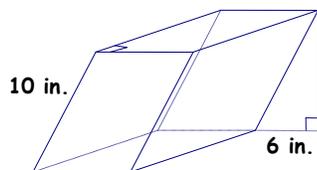
9. Find the missing measurement of the rectangular prism that has a volume of 54 cm^3 ?



10. What is the volume of the right triangular prism below?



11. Find the volume of the solid below.



The area of the base is 28 in^2 .

12. What is the surface area of a cube that has a volume of 64 mm^3 ?

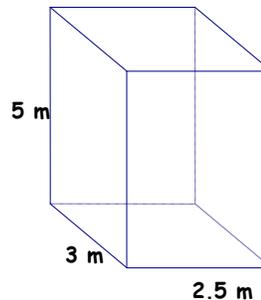
13. Albert has made a rectangular cake for Shannon's birthday. He needs to frost the cake. How much area will he need to frost if he only frosts the sides and the top of the cake? The dimensions of the cake are 9 in. x 13 in. x 3 in.

14. The volume of a rectangular prism is 28 m^3 . If the area of the base is 7 m^2 , then what is the height of the prism?

15. Darrell is filling an octagonal vase with water. The height of the vase is 18 in. and the area of the base is 20 in^2 . How much water can the vase hold?

16. Find the surface area of a cereal box 2"x 9"x 12".

17. A box has the following dimensions.



What is its surface area?