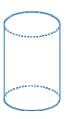


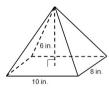
Part 1: Multiple choice. Show all your work1. What is the volume of the rectangular prism?



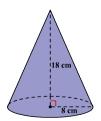
2. What is the volume of a right cylinder with circumference  $36\pi$  cm and height 7 cm?



3. What is the volume of the pyramid?



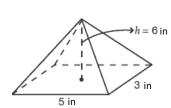
4. What is the volume of the cone?

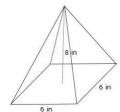


5. What is the volume of a sphere with diameter 45 cm?



## 6. Which pyramid has a volume of 96 in<sup>3</sup>?



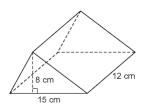


7. What is the volume (rounded to the nearest hundredth of a cubic ft) of a hemisphere with a base area of 121 $\pi$  ft²?



8. If the diameter of a hemisphere is multiplied by 4, what is the effect on the volume?

Part 2: show all your work, circle or box your answer9. Find the volume of the triangular prism.



10. Find the volume of a cone with slant height 39 ft and height 15 ft. Draw and label all dimensions on a diagram, then calculate.

11. Find the volume of a square pyramid with height 16 in and base area  $64 \text{ in}^2$ . Draw and label all dimensions on a diagram, then calculate.

12. Find the volume of the composite figure. The figure is a rectangular prism with a cylinder cut out of the middle. The diameter of the cylinder is 8 cm. (Use the  $\pi$  button on your calculator)

