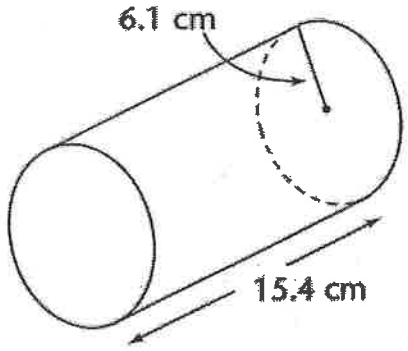
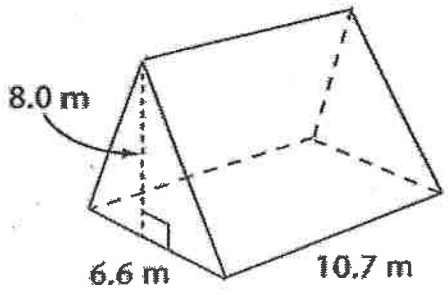
Section Assignment 1.2 Part 2
Volume of 3-D Objects

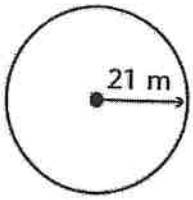
1. Find the volume of this cylinder. (2 marks)



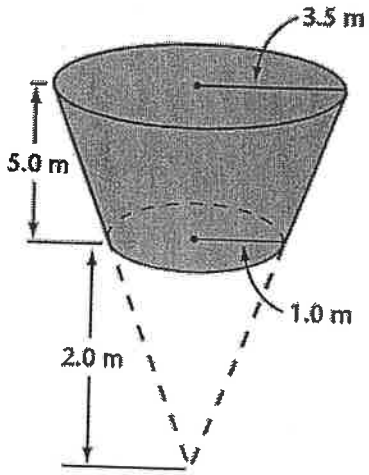
2. Find the volume of this triangular prism. (2 marks)



3. A spherical space vehicle has a radius of 21.0 m. What is the volume of the space vehicle? (2 marks)



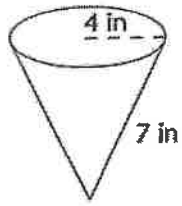
4. The shaded portion of the cone is called frustum. Find its volume. (2 marks)



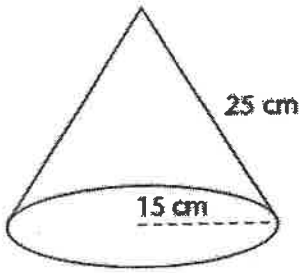
Section Assignment 1.2 Part 1
Surface Area of 3-D Objects

Find the surface area of the following objects. (12 marks)

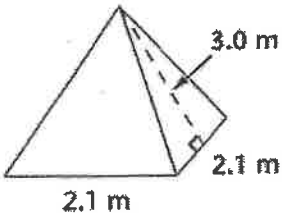
1.



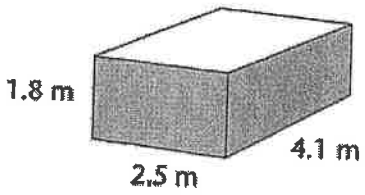
2.



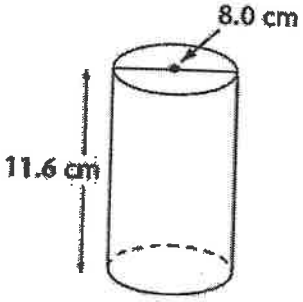
3.



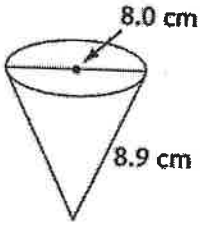
4.



5.

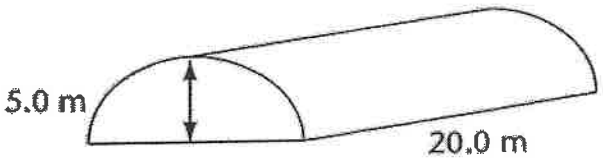


6.

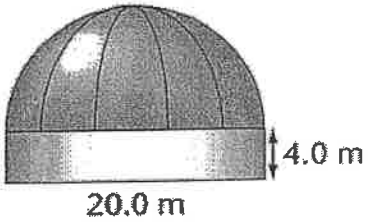


Section Assignment 1.2 Part 3
Surface Area and Volume Problem Solving

1. The curved surface is composed of steel panels 2.5 m by 1.5 m. About how many panels are needed for the roof? (2 marks)

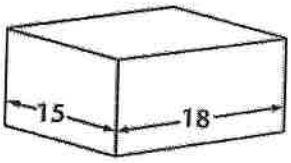


2. This inflatable plastic structure protects construction projects and workers from bad weather. The top is a hemisphere. What volume of space is enclosed by the structure? (2 marks)



3. Each of the four sides of the tent is 3.0 m long. Each side wall is 2.0 m high and the center of the roof is 3.0 m above the ground. Find the volume of the tent. (2 marks)

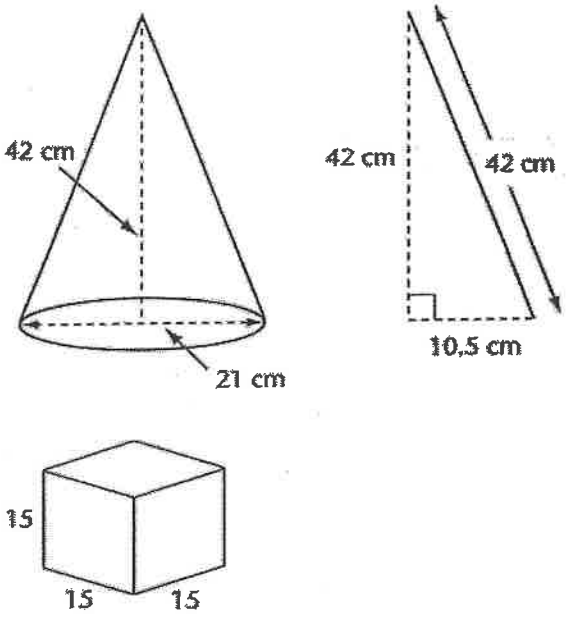
4. A rectangular prism has length 18.0 cm and width 15.0 cm. Its volume is 4590 cm^3. Find its height. (2 marks)



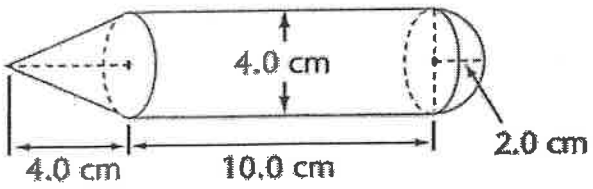
volume = 4590

5. A cone and a cube have these given dimensions:
   Cone: 42 cm high, diameter 21 cm
   Cube: side lengths 0.15 m

   Which object has the greater surface area? (2 marks)



6. Find the volume of this solid. (2 marks)



7. The Area of a sphere is 350 cm^2. What is it's volume? [Hint: Use Area to determine radius]

8. The volume of an underground section of cylindrical pipe is 500 m3. If you know that the pipe has a radius of 1 m. How long is the section of pipe.