

Date: _____

Name: _____

Mathematics 20-3

Chapter 3 Challenge

1. Write down the definitions for the following terms.

a. Surface area:

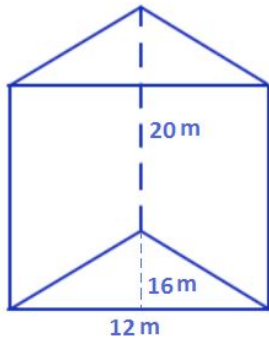
b. Nets: _____

c. Volume: _____

d. Capacity: _____

2. Use the image provided to answer the following questions.

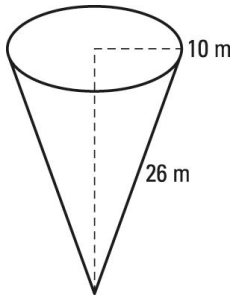
a. Draw a net for the following shape and label the dimensions of each side.



b. The 3D object below is known as a _____

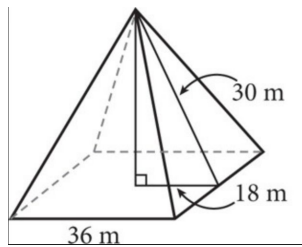
c. Calculate the surface area. *Round the nearest whole.*

3. Use the image provided to answer the following questions.
- Draw a net for the following shape and label the dimensions of each side.



- The 3D object below is known as a _____
- Calculate the surface area. *Round to the nearest tenth.*

4. Use the image provided to answer the following questions.
- Draw a net for the following shape and label the dimensions of each side.

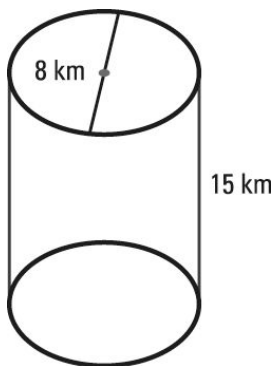


- The 3D object below is known as a _____

c. Calculate the surface area.

5. Use the image provided to answer the following questions.

a. Draw a net for the following shape and label the dimensions of each side.

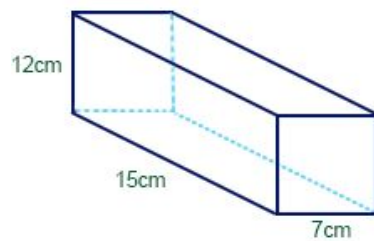


b. The 3D object below is known as a _____

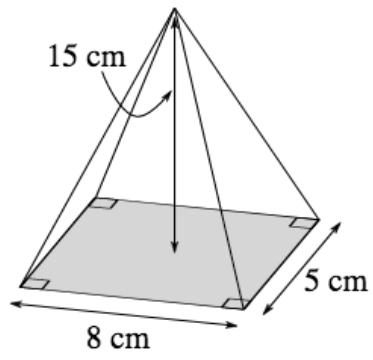
c. Calculate the surface area. *Round to the nearest tenth.*

5. Find the volume of the following objects.

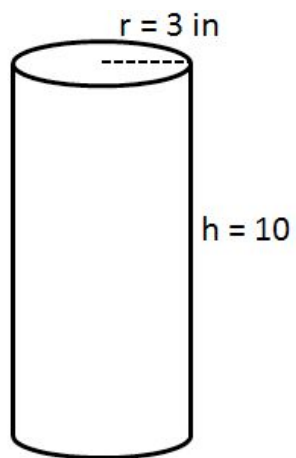
a.



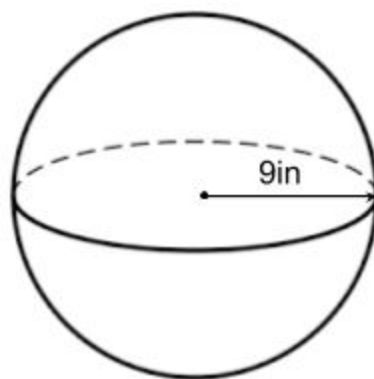
b.



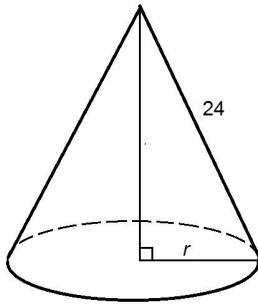
c.



d.



6. The volume of the cone is 318cm^3 . Use the information given in the image to determine the radius. *Round to the nearest centimetre.*



7. Determine the capacity of the shapes in question 5.

a. $1\text{L} = 1000\text{cm}^3$

b. $1\text{L} = 1000\text{cm}^3$

c. $1\text{L} = 61.0237\text{in}^3$

d. $1\text{L} = 61.0237\text{in}^3$

8. What is the difference between Volume and Capacity? Provide an example.
