

ASSIGNMENT: Surface Area Review

Name: _____

Date: _____

1. Match the following terms with the correct definition:

_____ perimeter

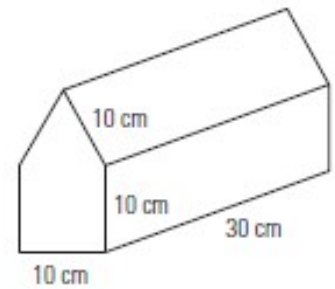
_____ area

_____ net

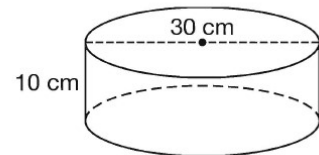
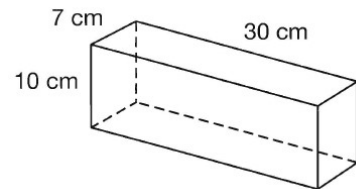
_____ surface area

- A. the space occupied by a flat (2-dimensional shape)
- B. a 2-dimensional pattern that you could cut and fold to make a model of a 3-dimensional shape
- C. the sum of all the areas of all the faces of a 3-dimensional shape
- D. the distance around a two-dimensional shape

2. Sketch a net of the object shown. Label the dimensions.

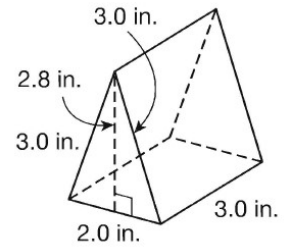


3. Which block of cheese has more surface area to wrap: the rectangular prism or the cylinder? By how much, to the nearest square centimetre?



_____ by _____

4. Calculate the surface area of the triangular prism.



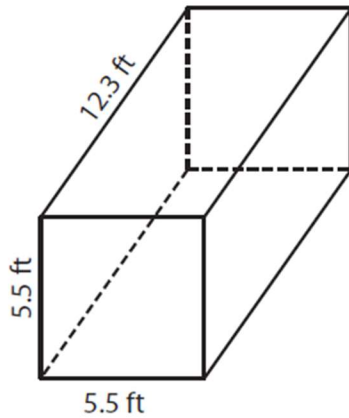
Surface Area = _____

5. A sphere has a diameter of 12 cm. What is the sphere's surface area, rounded to the nearest hundredth?

Surface Area = _____

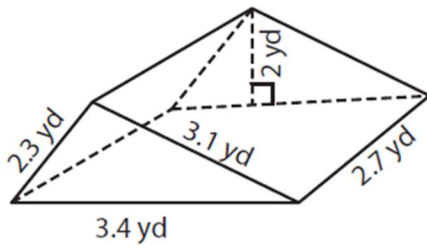
6. Calculate the surface area of each object. Round your answer to the nearest hundredth.

a)



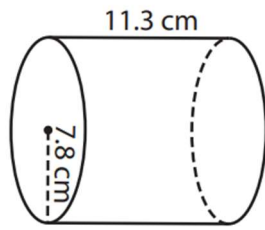
Surface Area = _____

b)



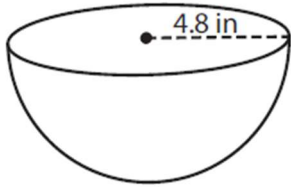
Surface Area = _____

c)



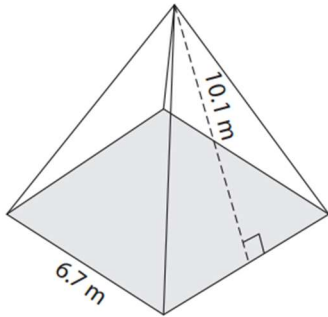
Surface Area = _____

d)



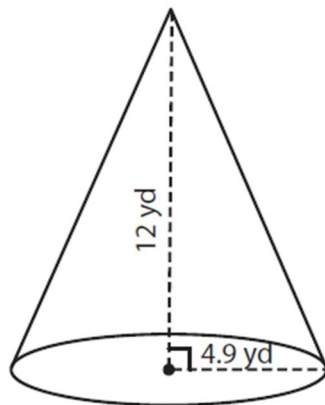
Surface Area = _____

e)



Surface Area = _____

f)



Surface Area = _____

7. Melissa is making a bird feeder with a metal roof.

Melissa made an error when she calculated the area of metal needed for the roof. Circle the error and correct her solution.

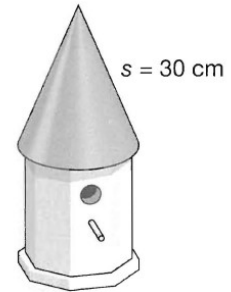
$SA(\text{roof})$ is the lateral area of cone

$$SA = \pi rs$$

$$= \pi(20 \text{ cm})(30 \text{ cm})$$

$$= 1884.955... \text{ cm}^2$$

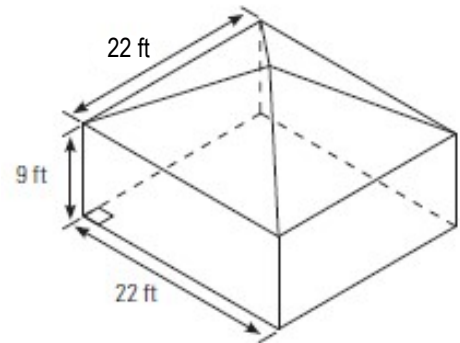
I will need about 1880 cm^2 of metal for the roof.



base diameter = 20 cm

Correct Solution = _____

8. Calculate the surface area of the figure shown. The height to the peak is 15 ft.



Surface Area = _____

1. D A B C

2.

3. cylinder by 1196 cm^2

4. 29.6 in^2

5. 452.39 cm^2

6. a) 331.1 ft^2 b) 30.56 yd^2

7. Mistake is circled below
 e) 180.23 m^2 f) 274.96 yd^2
 c) 936.07 cm^2 d) 217.15 in^2

8. 1827.32 ft^2
 correct answer = 942.5 cm^2
 $= \pi(20 \text{ cm})(30 \text{ cm})$ (she used diameter instead of radius)