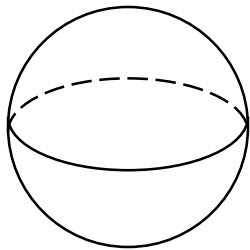


Leave your answers in simplified radical form and/or terms of π .

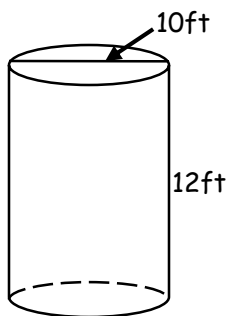
1) Circumference = 12π in.



Total Area = _____

Volume = _____

2)

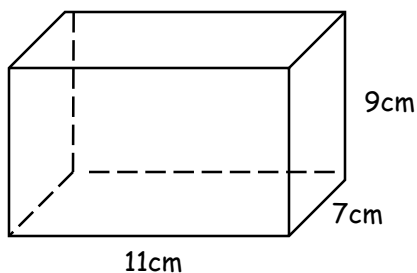


Lateral Area = _____

Total Area = _____

Volume = _____

3)

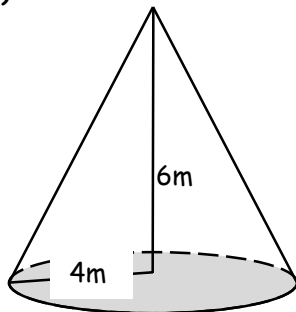


Lateral Area = _____

Total Area = _____

Volume = _____

4)



Lateral Area = _____

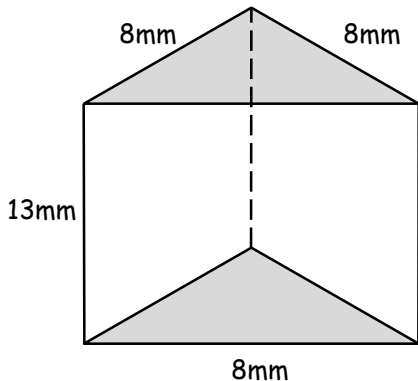
Total Area = _____

Volume = _____

Geometry/Trig
Unit 10 Review Packet

Leave your answers in simplified radical form and/or terms of π .

5)

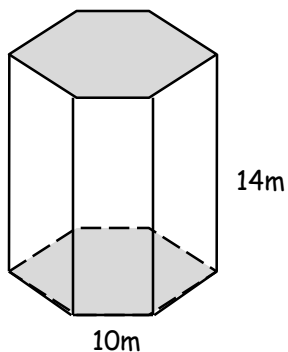


Lateral Area = _____

Total Area = _____

Volume = _____

6) The base is a regular hexagon.

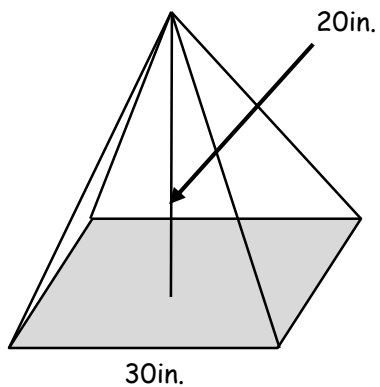


Lateral Area = _____

Total Area = _____

Volume = _____

7) The base is regular.



Lateral Area = _____

Total Area = _____

Volume = _____

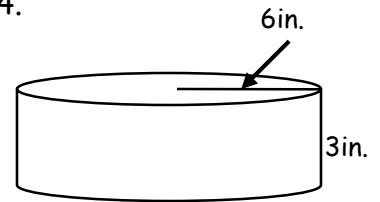
Geometry/Trig
Unit 10 Review Packet

Solve each word problem. Leave your answers in the specified form.

8) A cylinder has a volume of 1728π . If the height = radius, find the total area. Leave your answer in terms of π .

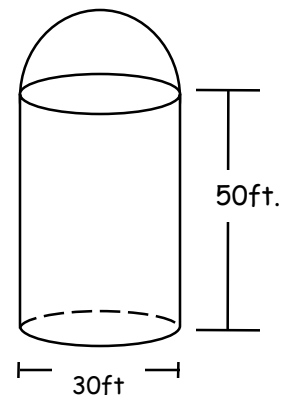
9) Popcorn is sold in a cardboard cylinder with radius 8cm and height 6cm. If the same amount of popcorn is to be sold in a cone with radius 6cm, what should be the height of the cone?

10) Wrapping paper is to be glued to the cylinder to the right, so that the cylinder is completely covered, including the bases. Find the amount of paper needed, rounded to the nearest square inch. Use $\pi = 3.14$.



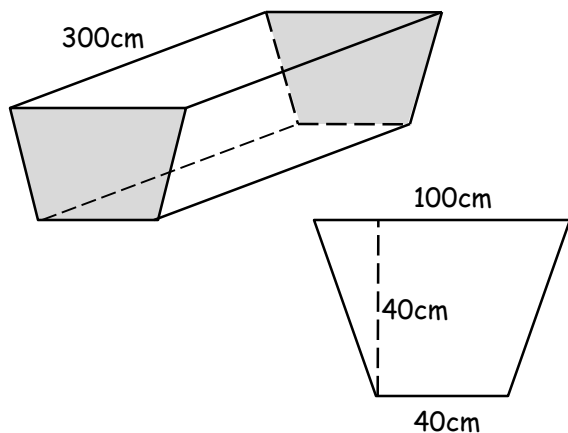
11) A spherical fishbowl has diameter 24cm. To fill the fishbowl three-fourths full, about how many liters of water will you need, assuming $1000\text{cm}^3 = 1\text{L}$. Use $\pi = 3.14$ and round to the nearest tenth.

12) A water storage tank consists of a cylinder capped with a hemisphere. Find the volume of the tank, if it was completely filled. Use $\pi = 3.14$.



Solve each word problem. Leave your answers in the specified form.

- 13) Below is a drinking trough for horses. Find the volume of the trough. Then, determine how much water will fill the trough if $1\text{cm}^3 = 0.001\text{L}$.



- 14) Two foam plastic balls have a scale factor 2:3.

- If the smaller ball has a radius 6cm, what is the radius of the larger ball?
- If the area of the larger ball is $36\pi\text{ cm}^2$, what is the area of the smaller ball (in terms of π)?
- If the larger ball weighs 12g, how much does the smaller ball weigh, to the nearest tenth?

- 15) Two similar cones have volumes 2π and 16π . Find the ratios of their:

- a) Radii _____ b) slant heights _____ c) volumes _____

- 16) Two similar pyramids have lateral areas 12 and 27. Find the ratios of their:

- a) Heights _____ b) total areas _____ c) volumes _____