Review: **SURFACE AREA & VOLUME OF NETS, PRISMS, PYRAMIDS, CYLINDERS, CONES & SPHERES**

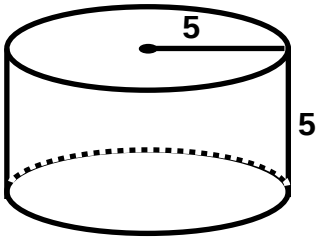
NAME: _____ DATE: _____ PERIOD: _____

For # 1 – 17, use the appropriate formula to determine the surface area and / or volume of each figure described. For APPROXIMATE answers, round to the nearest hundredth place value.

1. S(*Lateral*) ≈ _____

S(*Total Area*) ≈ _____

Find the APPROXIMATE lateral area and total area of the cylinder:



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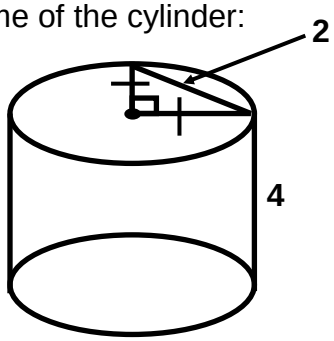
2. V = _____

Given r = $\sqrt{2}$, find the exact volume of the cylinder:



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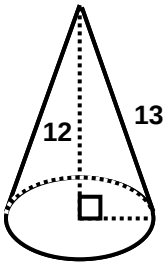
3. S(*Lateral*) = _____

S(*Total Area*) = _____

Find the EXACT lateral area and total area of the cone:



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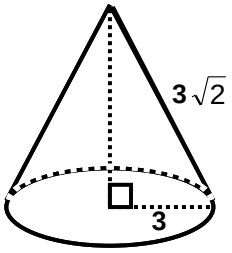
4. V = _____

Find the EXACT volume of the cone:



5. l = _____

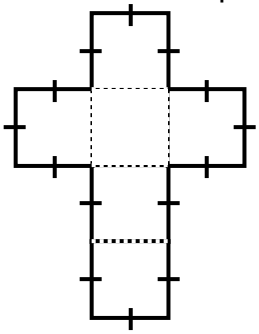
A cone has a lateral area of 80π in^2 and a radius of 8 in. Find its slant height.

6. r = _____

A cone has a volume of 225π cm^3 and a height of 15 cm. Find its radius.

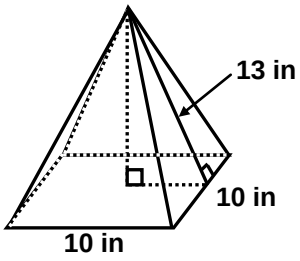
7. _____

The net BEST represents which solid?

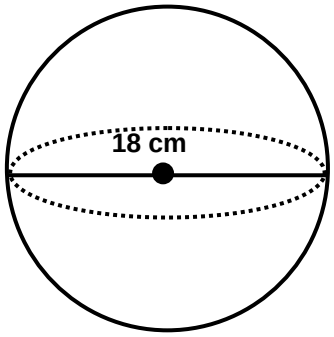


8. S (Total) ≈ _____

Find the APPROXIMATE Total Surface Area.



9. _____ Find the volume of the sphere:



10. r = _____ The surface area of a sphere is 576π square units.

11. V = _____ Find the volume of a cube with a base edge of 4 cm.

12. S(Lateral) = _____

S(Total) = _____

The volume of a cone is 100π cubic units.
Its height is 12 units.

13. S(*lateral*) = _____ The volume of a cylinder is 117π in^3 and its radius is 3 in.

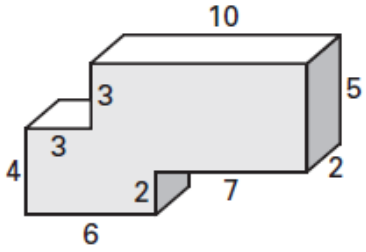
14. S(total) = _____ The volume of a cone is 1080π ft^3 and the radius is 9 ft.

15. S(total) = _____ If the volume of a cone is 12π ft^3 and the radius is 3 ft.

16. x = _____ The area of the base of a prism is 4x square inches, and the height of the prism is 2.5x inches. If the prism has a volume of 1,000 cubic inches, what is the value of 'x'?

17. S(total) = _____ A cube has a side of 7 centimeters.

18. V = _____ *Find the volume of the solid by determining how many unit cubes are contained in the solid.*



19. V = _____ *Find the volume of the solid by determining how many unit cubes are contained in the solid.*