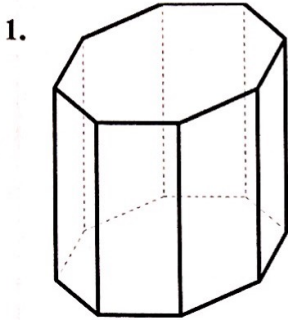
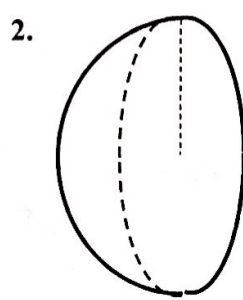


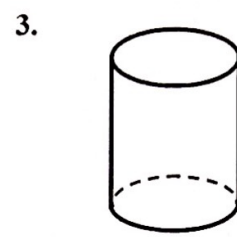
Identify the following shapes. Be as specific as possible (use the shape of the Base if necessary).



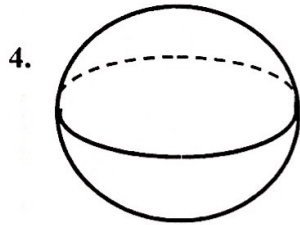
_____ Octagonal prism



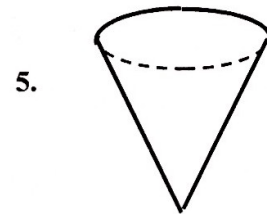
_____ Hemisphere



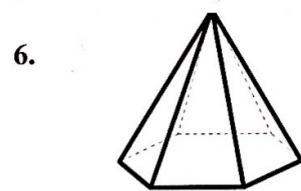
_____ Cylinder



_____ Sphere

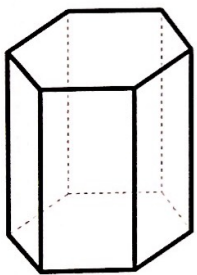


_____ Cone

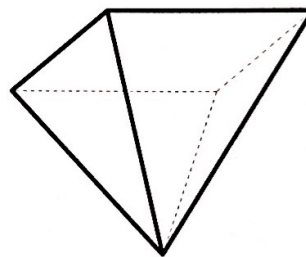


_____ Hexagonal Pyramid

7. Fill in the appropriate values for the numbers of faces, edges, and vertices below.

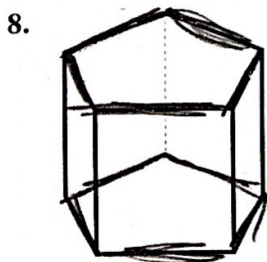


Faces: 8
Edges: 18
Vertices: 12

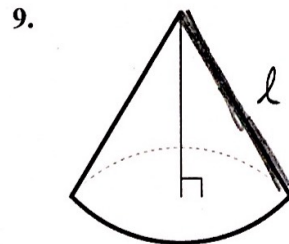


Faces: 5
Edges: 8
Vertices: 5

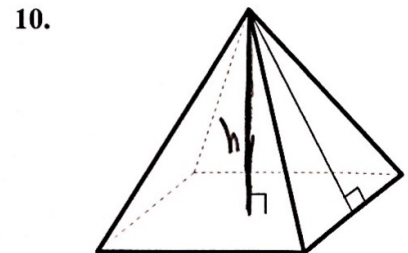
Highlight the indicated object on each geometric solid below.



Base(s)



Slant Height



Height

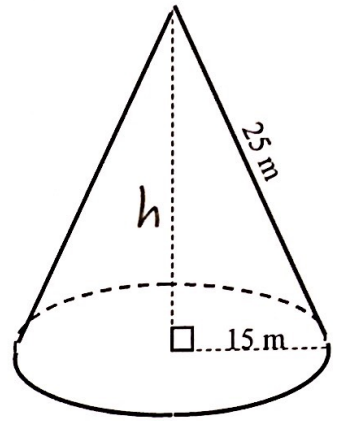
11. Find the approximate height of the figure.

$$15^2 + h^2 = 25^2$$

$$225 + h^2 = 625$$

$$h^2 = 400$$

$$h = 20 \text{ m}$$



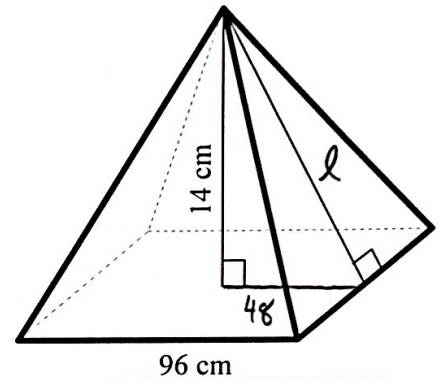
12. Find the approximate slant height of the figure.

$$14^2 + 48^2 = l^2$$

$$196 + 2304 = l^2$$

$$2500 = l^2$$

$$50 \text{ cm} = l$$



13. Find the exact total Surface Area of the geometric solid.

$$SA = LA + B$$

$$SA = 260\pi + 100\pi$$

$$SA = 360\pi \text{ m}^2$$

$$LA = \pi r l$$

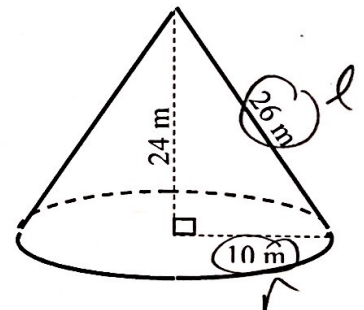
$$LA = \pi (10)(26)$$

$$LA = 260\pi$$

$$B = \pi r^2$$

$$B = \pi (10)^2$$

$$B = 100\pi$$



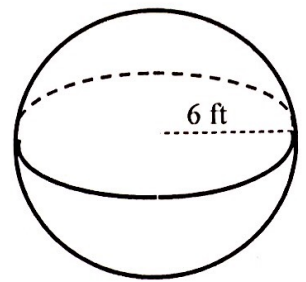
14. Find the exact total Surface Area of the geometric solid.

$$SA = 4\pi r^2$$

$$SA = 4\pi (6)^2$$

$$= 4\pi (36)$$

$$SA = 144\pi \text{ ft}^2$$



15. Find the exact total Surface Area of the geometric solid.

I choose the Bases to be top/bottom.

$$SA = LA + 2B$$

$$SA = 540 + 2(180)$$

$$= 540 + 360$$

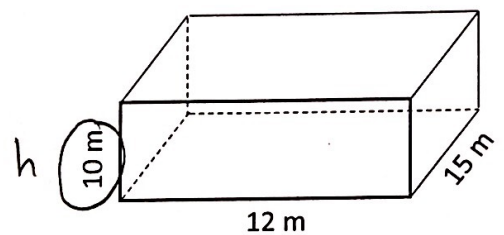
$$SA = 900 \text{ m}^2$$

$$LA = P \cdot h$$

$$LA = (54)(10)$$

$$LA = 540$$

$$B = 180$$



$$P = 2(12) + 2(15) = 54$$

$$B = (12)(15) = 180$$

$$h = 10$$

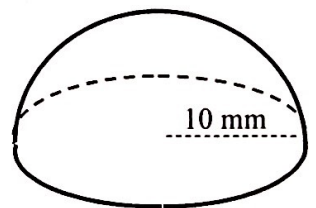
16. Find the exact total Surface Area of the geometric solid.

$$SA = \frac{1}{2}(4\pi r^2) + B$$

$$= 2\pi (10)^2 + \pi (10)^2$$

$$= 2\pi (100) + \pi (100)$$

$$SA = 300\pi \text{ mm}^2$$



17. Find the total Surface Area of the geometric solid.

$$SA = LA + 2B$$

$$SA = 320\pi + 128\pi$$

$$SA = 448\pi \text{ ft}^2$$

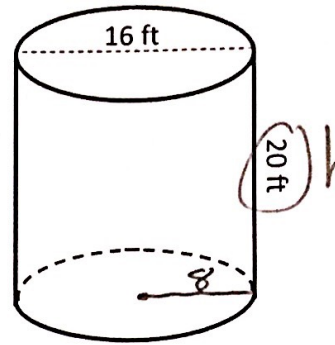
$$LA = P \cdot h$$

$$LA = (16\pi)(20)$$

$$LA = 320\pi$$

$$B = 64\pi$$

$$2B = 128\pi$$



$$P = 2\pi r$$

$$= 2\pi(8)$$

$$P = 16\pi$$

$$B = \pi r^2$$

$$= \pi(8)^2$$

$$B = 64\pi$$

18. Find the exact total Surface Area of the geometric solid.

$$SA = LA + B$$

$$SA = 864 + 324$$

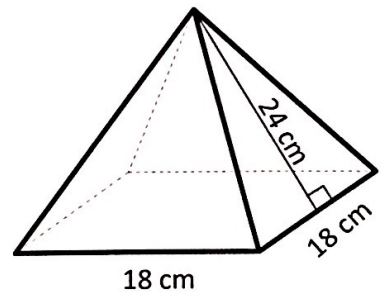
$$SA = 1188 \text{ cm}^2$$

$$LA = \frac{P \cdot l}{2}$$

$$LA = \frac{(72)(24)}{2}$$

$$LA = 864$$

$$B = 324$$



$$P = 4(18) = 72$$

$$l = 24$$

$$B = (18)(18) = 324$$