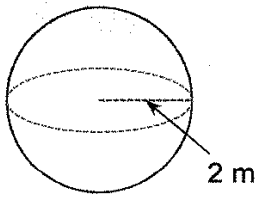
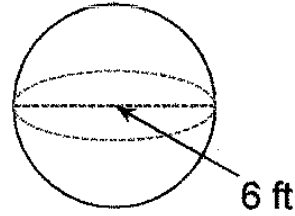


Find the surface area of the solids below.

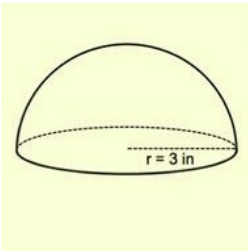
1.



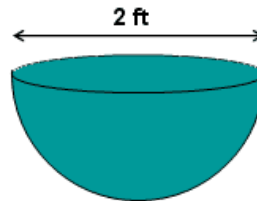
2.



3.



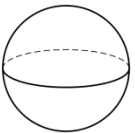
4.



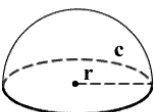
5. Scientists construct a biodome to perform experiments on an ecosystem. If the biodome is in the shape of a hemisphere, how much surface area material would be needed if the scientists wanted to create a dome with a diameter of 150 yds?



6. The surface area of a sphere is 196π square inches. Find the radius of the sphere.



7. The surface area of a hemisphere is 48π square inches. Find the radius of the sphere.

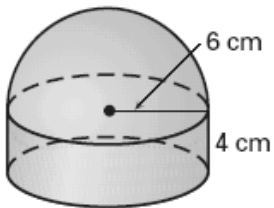


8. Describe and correct the error in finding the surface area of a hemisphere with radius 5 feet.

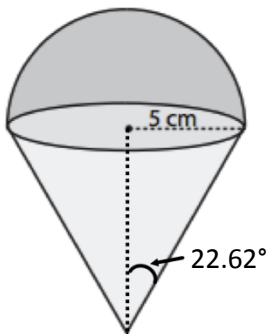
$$\begin{aligned}
 S &= 4\pi r^2 \\
 &= 4\pi(5)^2 \\
 &= 100\pi \\
 &\approx 314.16 \text{ ft}^2
 \end{aligned}$$

Find the area of the composite solid

9. Keep answer exact.



10. Round approximate answer to the nearest thousandth.



1) $16\pi \approx 50.27\text{m}^2$ 2) $36\pi \approx 113.1\text{ft}^2$ 3) $27\pi \approx 84.82\text{in}^2$ 4) $3\pi \approx 9.42\text{ft}^2$ 5) $11,250\pi \approx 35,342.92\text{yd}^2$ 6) 7in 7) 4in

8) Formula for a sphere was used $75\pi \approx 235.62\text{ft}^2$ 9) $156\pi \approx 490.09\text{cm}^2$ 10) $\approx 115\pi \approx 361.283\text{cm}^2$