

Year 09 Weekly Tutorial - 04

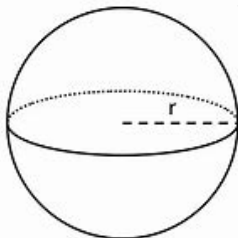
mathsalpha.com

1. Solve. $\frac{3x-5}{7} = \frac{x+11}{2}$

2. Solve by factorization, $2x^2 + x - 15 = 0$

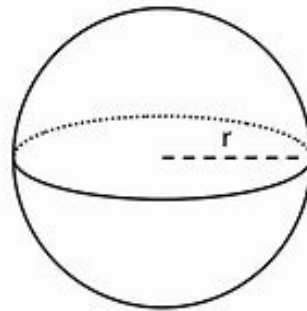
3. Find the surface area and volume of the following spheres. (Give the answer correct to 1dp)

a)



$r = 5 \text{ cm}$

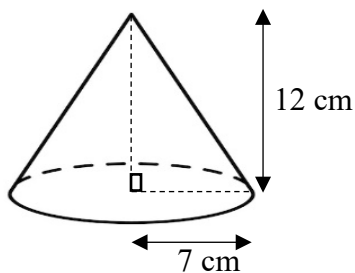
b)



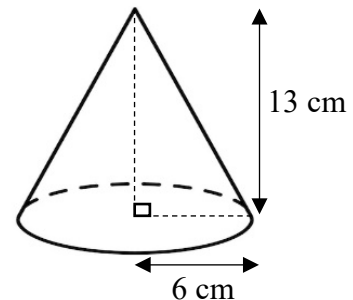
$r = 7.5 \text{ cm}$

4. Find the surface area and volume of the following cones. (Give the answer correct to 1dp)

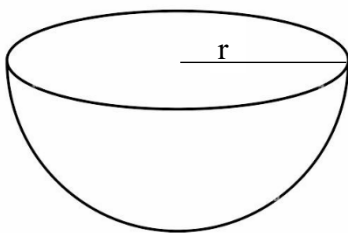
a)



b)

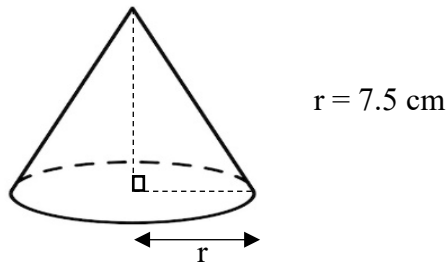


5. Find the volume and the total surface area of the hemisphere.



$r = 9 \text{ cm}$

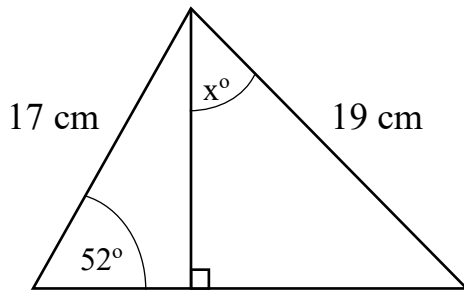
6. Find the volume of the cone, if area of the cone is 353.4 cm^2 .



7. Volume of a sphere is 7238 cm^3 . Find the curved surface area of the cone. Give the answer correct to 1dp.

8. Make l the subject of the formula. $y = \pi \sqrt{\frac{x-l}{l}}$

9. Find the x° .



10. Find the equation of line l_1 .
Give the equation in the form $y = mx + c$.

