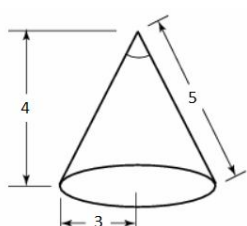
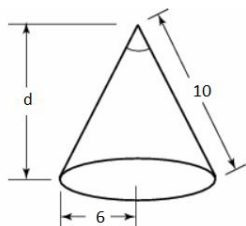


**Cones and Frustums – www.m4ths.com**

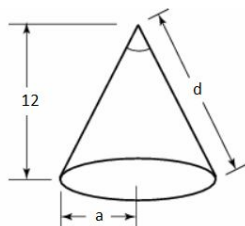
(1) Find the missing values in each right cone below. The last one is an isosceles cone!



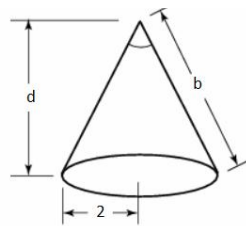
Volume = a  
Curved Surface Area = b  
Total Surface Area = c



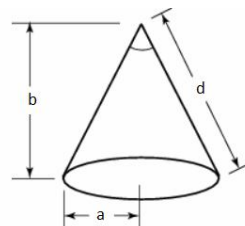
Volume = a  
Curved Surface Area = b  
Total Surface Area = c



Volume =  $100\pi$   
Curved Surface Area = b  
Total Surface Area = c

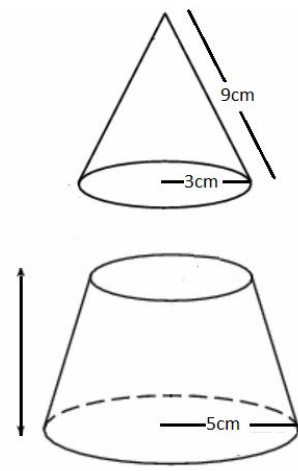
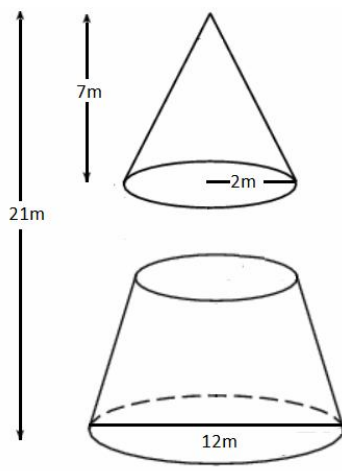
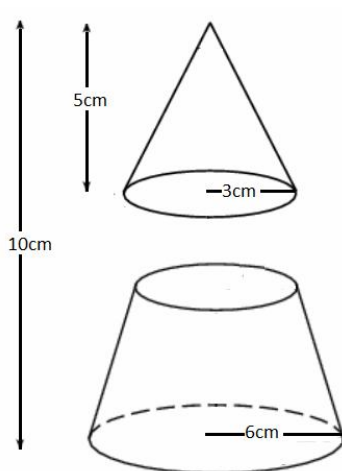


Volume = a  
Curved Surface Area =  $8\pi$   
Total Surface Area = c

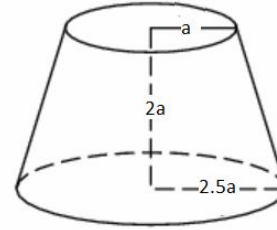
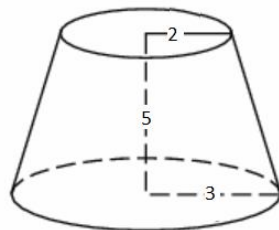
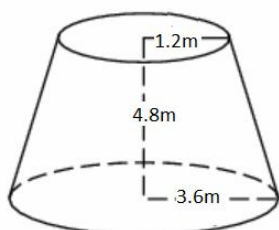
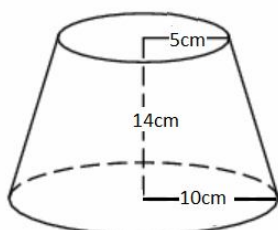


Volume =  $12\pi$   
Curved Surface Area = c  
Total Surface Area =  $24\pi$

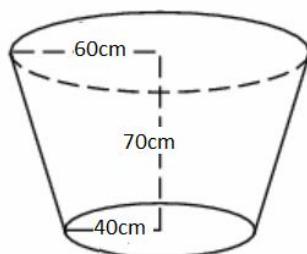
(2) Find the volume of each frustum below.



(3) Find the volume of each frustum below. Give the answer to the last one in terms of a.



(4) Abdul is making thin aluminium plant pots. The pots have a base and an open top as shown below.



(a) Find the capacity of the pot giving your answer to 3 significant figures.

(b) Given that the material is 12p for each square cm, find the least cost of making the pot.

(c) Abdul now makes a solid pot out of a different material. Given that the mass of the pot is 8.2kg, find the density of the pot giving your answer in  $\text{kg/m}^3$ .