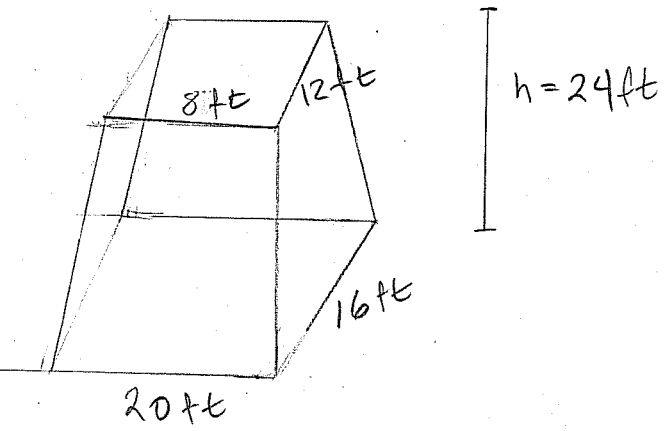


SOLID GEOMETRY

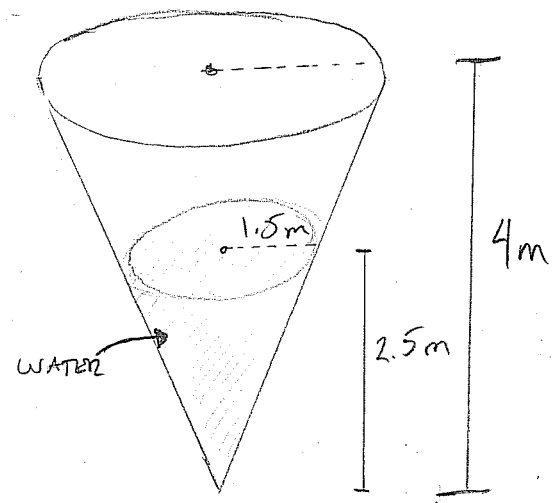
1) FIND THE VOLUME AND SURFACE AREA OF THE FOLLOWING FIGURES

1) FRUSTUM



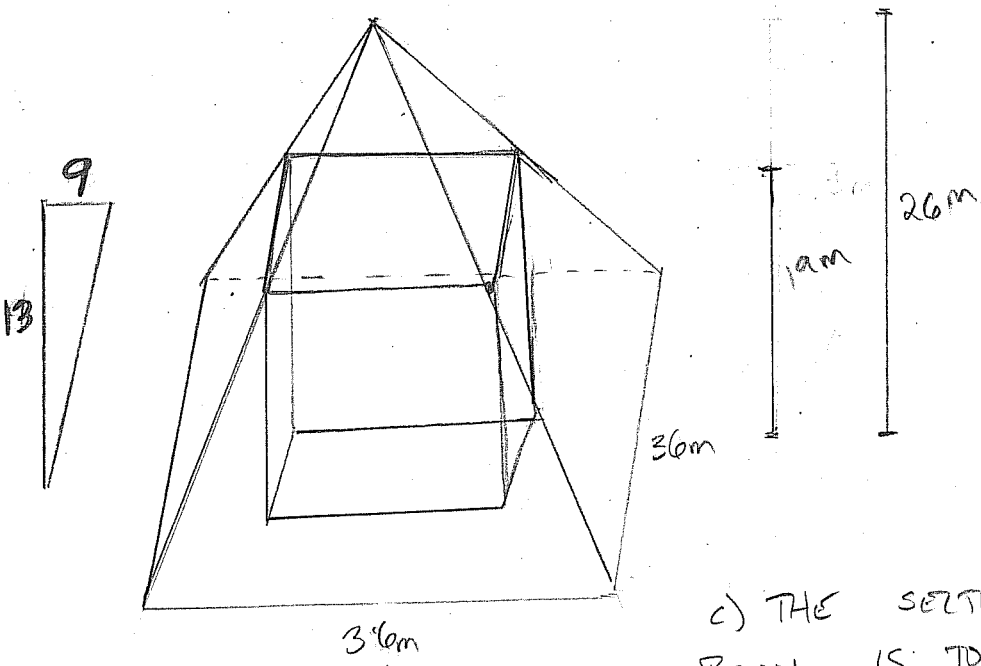
2) CONE SHAPED TANK.

- a) FIND VOLUME OF EMPTIED WATER
- b) FIND VOLUME OF REMAINING WATER.



3) PYRAMID SHAPED BUILDING SIMILAR TO THE LOUVRE WITH A SQUARE PRISM REMOVED INSIDE FOR A ROOM. THE HEIGHT OF THE ROOM IS 19m AND THE HEIGHT OF THE PYRAMID IS 26m

THE TOP EDGES OF OF THE ROOM TOUCH THE SIDES OF THE PYRAMID.



- a) FIND THE VOLUME
- b) THE CEILING AND WALLS IN THE ROOM AS WELL AS THE OUTSIDE WALLS ARE TO BE PAINTED. CALCULATE THE SURFACE AREA.

c) THE SECTION DIRECTLY ABOVE THE ROOM IS TO BE INSULATED. CALCULATE THE VOLUME