

Do required calculations:

a)



Volume = (in cubic feet)

Weight if filled with Portland Cement = _____

b)



Radius = 6 yds

Height (1) = 12 yds

Height (2) = 4 yds

Total Volume = _____

Number of bushels of wheat is filled to 75% capacity = _____

Weight is filled to 100% capacity with oats = _____

c)



Diameter = 8 meters

Height (1) = 30 meters

Height (2) = 4 meters

Total Volume = _____

Surface Area of the cylinder = _____

Total weight if filled with corn = _____

Total number of pails of paint required to paint cylinder if each pail covers 2000 sq ft. = _____

d)



Radius = 6 feet

Length (Height) = 12 feet

Volume = _____

Surface Area = _____

Total weight if container filled with water = _____

Amount of paint primer required if each can covers 380 square feet (ignore legs) = _____

e)



Radius = 100 feet

Height = 40 feet

Volume = _____

Surface Area = _____

Cost to redo a tar and gravel roof if the cost of materials and labour is \$4.59 a square foot = _____

How many gallons of oil would this structure hold? _____

f)



Radius = 12 feet

Height of Lower cone = 10 feet

Height of cylinder = 16 feet

Height of upper cone = 6 feet

Volume = _____

Number of Bushels of Flax this structure would hold if filled to capacity = _____

Weight of Rye is stored in structure and it was filled to 40% capacity = _____

g)



Diameter = 6 yards

Length = 40 yards

Volume = _____

Total number of gallons of water that these structures would hold = _____

h)



Dimensions at the base 756 feet by 756 feet

Height = 481 feet

Volume = _____

Surface area (only exposed surfaces) = _____

Total weight of the structure if it had been built of compacted clay = _____

i)



Diameter = 165 feet

Volume = _____

Surface Area = _____

15% of the surface is steel and the rest is glass

What is the total weight of the structure if the steel is on average 4 inches thick and the glass is 2 inches thick? _____