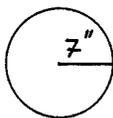# Volume – Homework #1

1) Calculate the area of each.
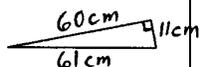
a)
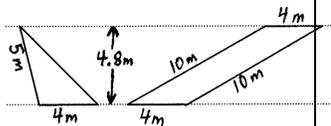

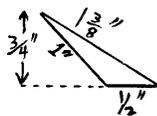7″

b)
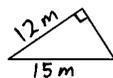

8cm

c)

4″
7″

d)

60cm
61cm
11cm

e)

4m
5m
4.8m
10m
10m
4m
4m

f)

3/4″
1″
3/8″
½″

g)

12m
15m

h)

5.5m
4m
5m
8.5m

i)

17m
17m
16m

j)

12cm
12cm
12cm

c)

13″
10″
5″
12″

d)

3cm
6cm
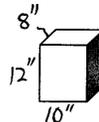
2) Calculate the volume.

a)

8″
12″
10″

b)

½″
1″
2″

e)

4m
8m
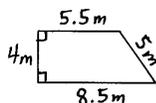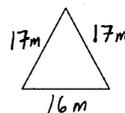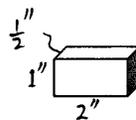
Volume − Homework #2

1) a) The formula
$V = A_{Base} \cdot H$
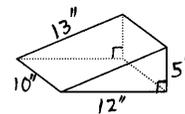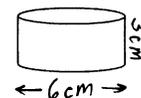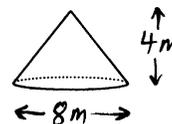is used for what?

b) The formula
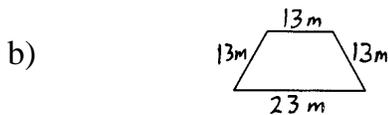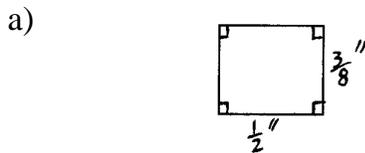$V = \frac{1}{3} A_{Base} \cdot H$
is used for what?

2) a) How many square feet are in a square yard?
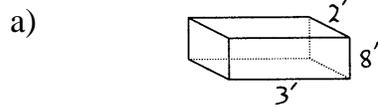
b) How many cubic feet are in a cubic yard?

c) How many square centimeters are in a square meter?

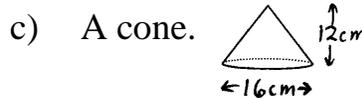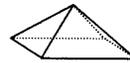d) How many cubic centimeters are in a cubic meter?

3) Calculate the area.

a)

b)

c)

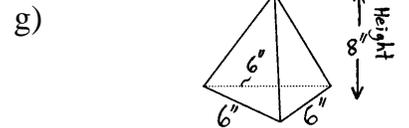d)

e)

4) Find the volume of each:

a)

b) A pyramid has a total height of 150 feet, and its square base measures 200 feet on each side.
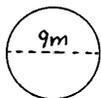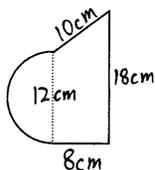
c) A cone.

d)

e)

f) A sphere that has a diameter of 18cm?

g)

Volume − Homework #3

1)   Calculate the area.

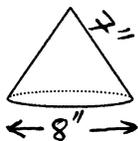a)

9m

b)

10cm

12cm   18cm

8cm

c)

2″   2″

2″

2)   Calculate the volume.

a)

16″

←20″→

b)

2″

←8″→
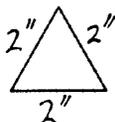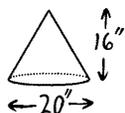
3)   Calculate the volume and surface area.

a)

4m

3m

6m

b)

16″

←20″→
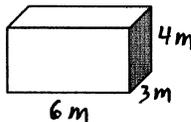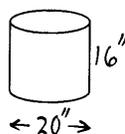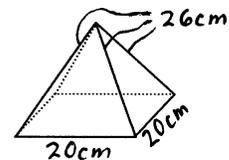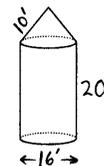
c)   A ball that has a 12-inch diameter.

d)

26cm

20cm   20cm

e)   A "pointed" cylinder.

10′

20′

←16′→

Volume – Homework #4

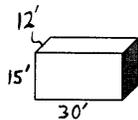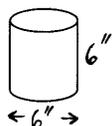1) Calculate the volume and surface area of each solid.

   a) A box.

   b) A cylinder.

   c) The Earth, which has a diameter of about 8000 miles.

2) Given a cube with edges 6" long…

   a) Calculate the volume. Give your answer both in ft^3 and in^3.
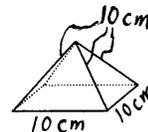
   b) Calculate the surface area. Give your answer both in ft^2 and in^2.

3) Calculate the volume of each solid.

   a) A cone.

   b) A pyramid.

   c)

   d) *Challenge!* A tetrahedron with all edges 10 cm long.