HOMEWORK — LESSON 6 KEY

PG 105

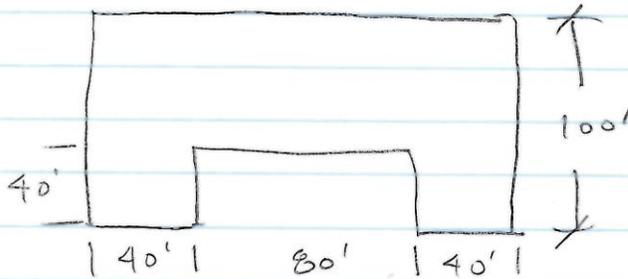1) VOLUME = $SIDE^3$
   $(9')^3 = \boxed{729 \text{ FT}^3}$

3) $(8'-11'')^3 = \boxed{709 \text{ FT}^3}$

4) $L = 6''$, $W = 5''$, $H = 4''$
   $6'' \times 5'' \times 4'' = \boxed{120 \text{ CU IN}}$

6) $L = 10'$, $W = 8'$, $H = 2\frac{1}{2}'$
   $10' \times 8' \times 2\frac{1}{2}' = \boxed{200 \text{ CU FT}}$

PG 106

11)

AREA $= 2(1600 \text{ FT}^2) + (60' \times 160')$
     $= 3200 \text{ FT}^2 + 9600 \text{ FT}^2$
VOL $= 12,800 \text{ FT}^2 \times 8 \text{ FT} = 102,400 \text{ CU FT}$
     $= \boxed{3792.59 \text{ YDS}^3}$

17) WALL = $8'-0'' \times 8'' \times 25'-0'' = 4.94 \text{ YDS}^3$
     FOOTING = $12'' \times 1'-8'' \times 25'-0'' = 1.54 \text{ YDS}^3$
                                          $\boxed{6.48 \text{ YDS}^3}$

113 3,4
115 13

PG 113

3.) R = 9'

$A = \pi (9')^2 = 254.469 \ FT^2$

$V = (42'-2") \times 254.469 \ FT^2 = \boxed{10,730.11 \ FT^3}$

4) $A = \pi (9.5')^2 = 283.53 \ FT^2$

$V_O = (42'-6") \times 283.53 \ FT^2 = 12,050 \ FT^3$

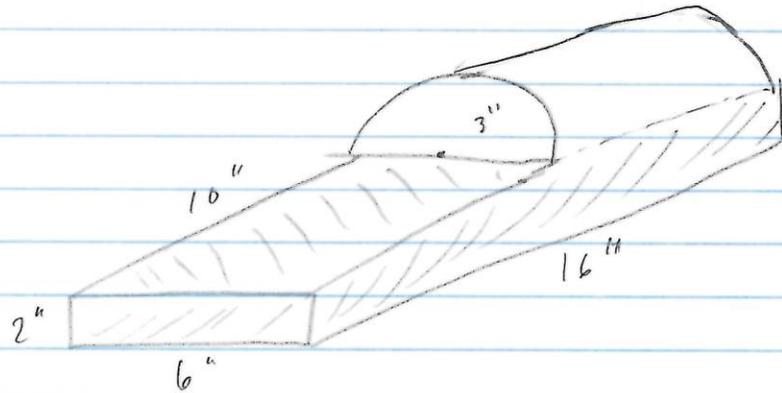$V_I = (42'-6") \times 254.469 \ FT^2 = \underline{10,815. \ FT^3}$

$\boxed{1235 \ FT^3}$

PG 115

13.

RECTANGULAR PART

$$2'' \times 6'' \times 16'' = 192 \text{ IN}^3$$

ROUND PART IS HALF A CYLINDER

VOLUME OF CYLINDER $= \pi R^2 h$

$$\frac{\pi \times (3'')^2 \times 6''}{2} = \boxed{84.823 \text{ IN}^3}$$