Answers to Review:

① a) 72.4km
b) 190.5cm
c) 0.037kg
d) 1.625 lb
e) 1.7 mi

② 720 in

③ a) $1859958.49\ in^3$ or $1859996.28\ in^3$

b) $472.9\ ft^3$

① $254\ yd^3$

② $498.95\ cm^3$

③ $137\ cm^3$

④ $1063.08\ m^3$

⑤ $261.7\ ft^3$

⑥ $88\ yd^3$

⑦ $2518\ km^3$

⑧ $330\ yd^3$

⑨ $278.36\ cm^3$

⑩ a) 86°F
b) 25°C
c) 18.925L
d) 162.7mL
e) 1293.07km

Review for Test - Answers

1.

(a) $45 \times \frac{Km}{mi}$

$45 \times \frac{1.6093}{1}$

$= 72.4Km$

(b) $75 \times \frac{cm}{in}$

$75 \times \frac{2.54}{1}$

$= 190.5cm$

(c) $37 \times \frac{Kg}{g}$

$37 \times \frac{1}{1000}$

$\frac{37}{1000}$

$= 0.037Kg$

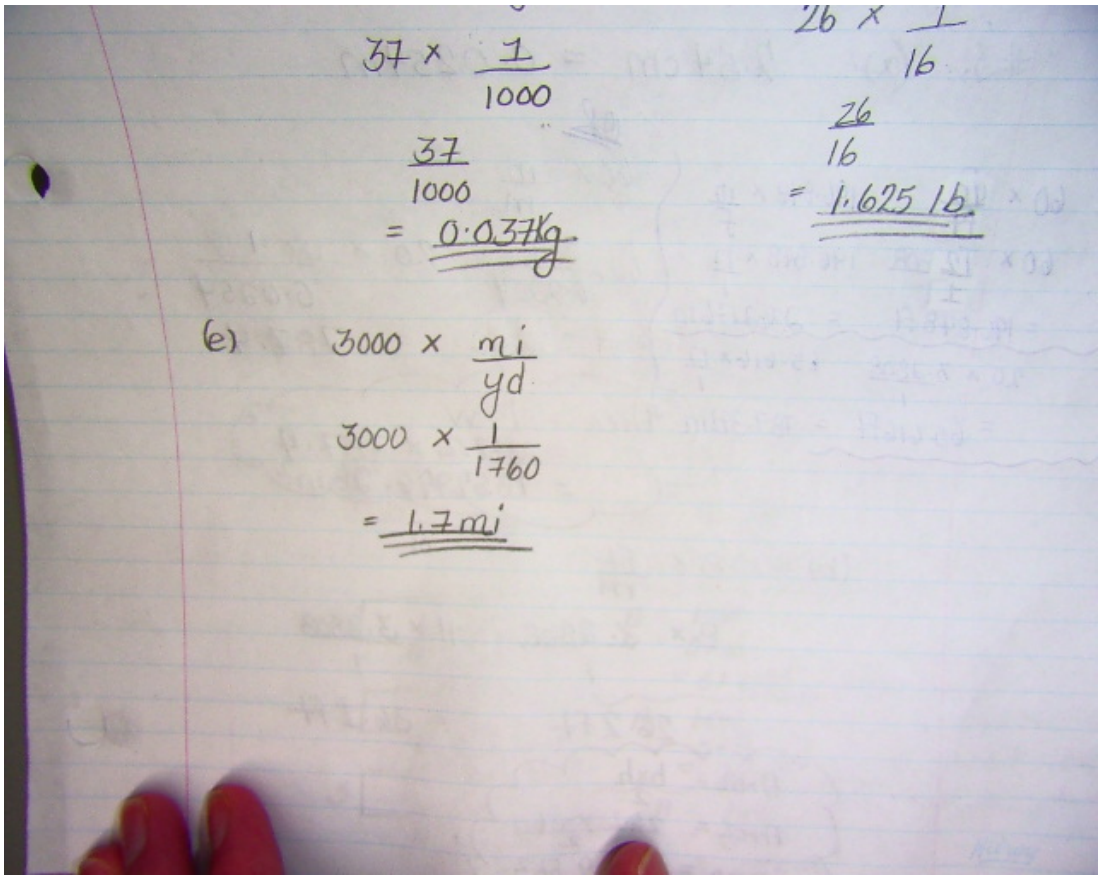
(d) $26 \times \frac{lb}{oz.}$

$26 \times \frac{1}{16}$

$\frac{26}{16}$

$= 1.625\ lb.$

(e) $3000 \times \frac{mi}{ud}$

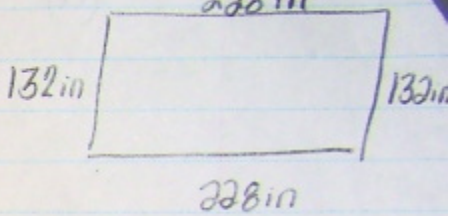

37 x 1/1000
37/1000
= 0.037kg
26 x 1/16
26/16
= 1.625 lb
(e) 3000 x mi/yd
3000 x 1/1760
= 1.7 mi

#2.

(a) $11 \times \frac{in}{ft}$ $19 \times \frac{12}{1}$

$11 \times \frac{12}{1}$ $= 228 in$

$= 132 in$



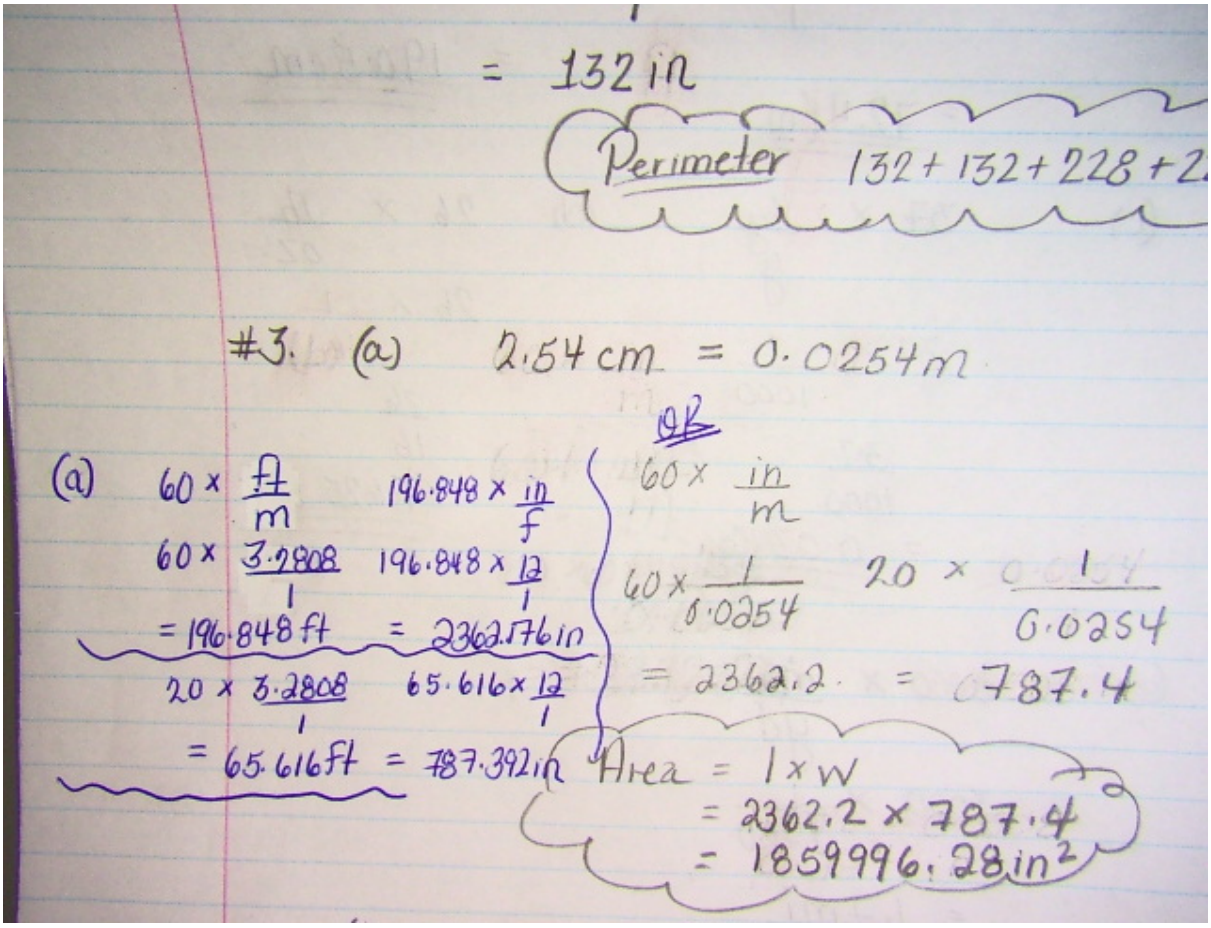
Perimeter $132 + 132 + 228 + 228 = 720 in$

#3. (a) $2.54 cm = 0.0254 m$

OR

$\frac{ft}{m}$ $196.848 \times \frac{in}{f}$ $60 \times \frac{in}{m}$

3.2808 196.848×12 $\times \frac{1}{1}$ $20 \times$



= 132 in

Perimeter 132 + 132 + 228 + 2

#3. (a) 2.54 cm = 0.0254 m

(a) $60 \times \frac{ft}{m}$ $196.848 \times \frac{in}{f}$

$60 \times \frac{3.2808}{1}$ $196.848 \times \frac{12}{1}$

$= 196.848\ ft$ $= 2362.176\ in$

$20 \times \frac{3.2808}{1}$ $65.616 \times \frac{12}{1}$

$= 65.616\ ft$ $= 787.392\ in$

$60 \times \frac{in}{m}$

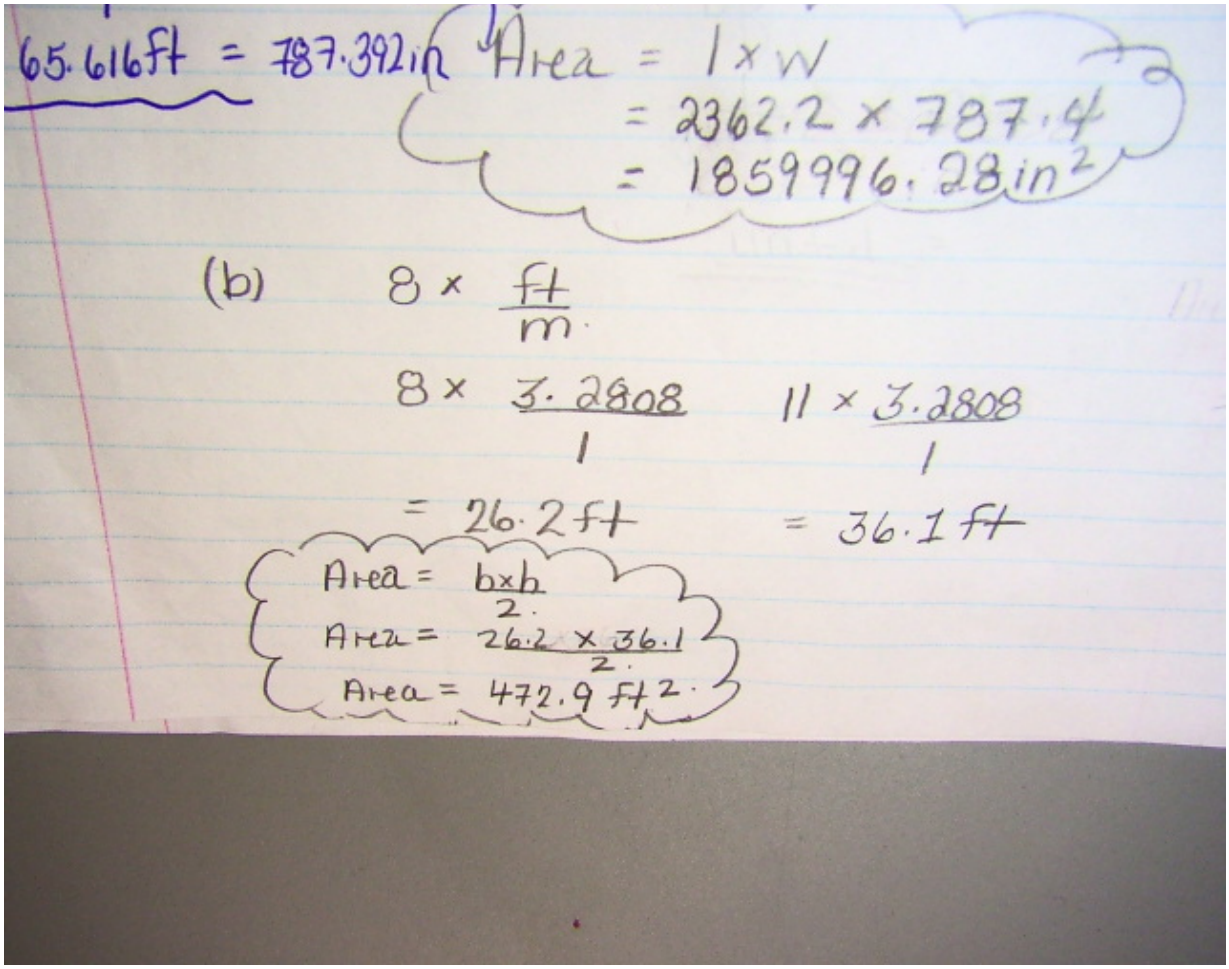
$60 \times \frac{1}{0.0254}$ $20 \times \frac{1}{0.0254}$

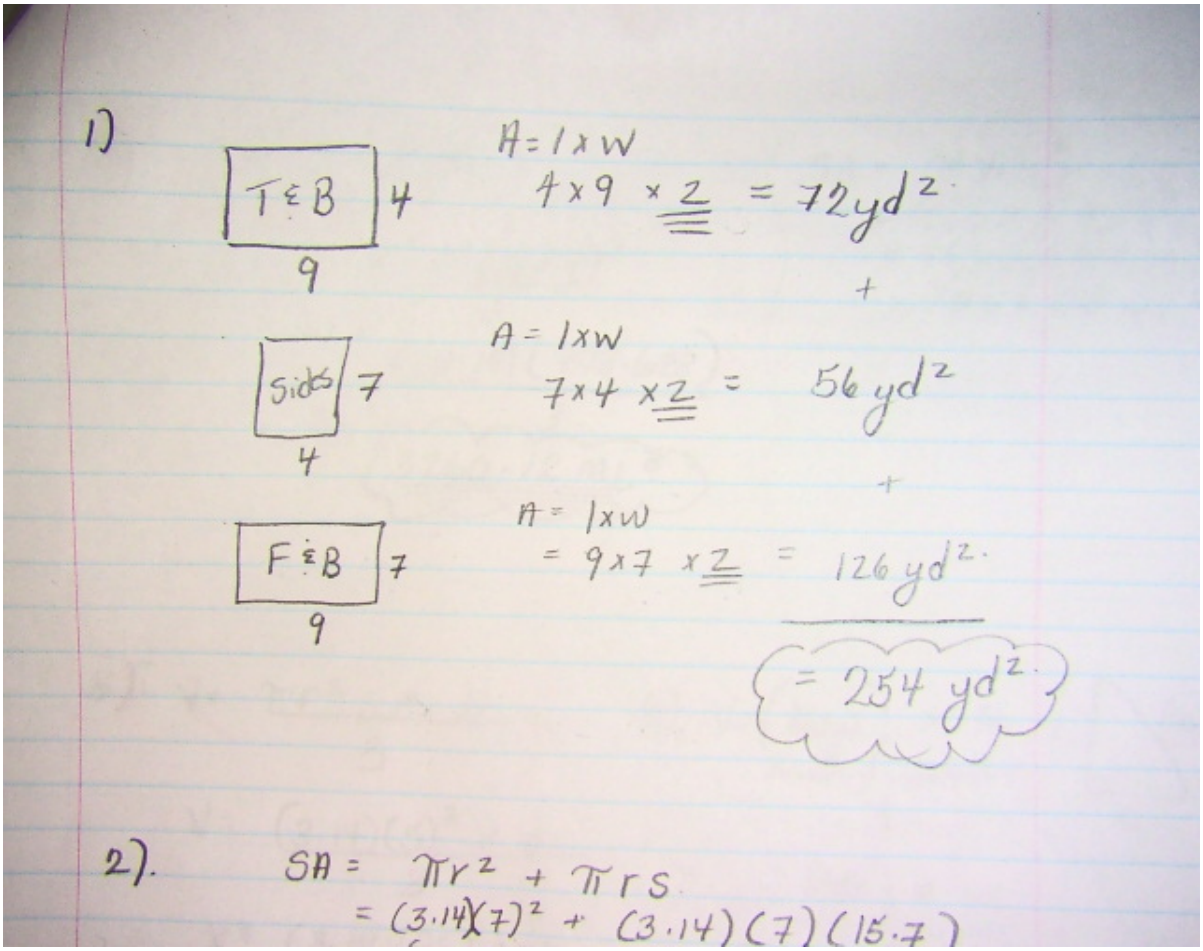
$= 2362.2$ $= 787.4$

Area = l x w

= 2362.2 x 787.4

= 1859996.28 in^2


65.616ft = 787.392in
Area = l x w
= 2362.2 x 787.4
= 1859996.28 in²
(b) 8 x ft/m
8 x 3.2808/1
= 26.2 ft
11 x 3.2808/1
= 36.1 ft
Area = b x h / 2
Area = 26.2 x 36.1 / 2
Area = 472.9 ft²


1)
T & B
4
9
A = l x w
4 x 9 x 2 = 72 yd²
+
Sides
7
4
A = l x w
7 x 4 x 2 = 56 yd²
+
F & B
7
9
A = l x w
= 9 x 7 x 2 = 126 yd²
= 254 yd²
2).
SA = πr² + πrs
= (3.14)(7)² + (3.14)(7)(15.7)

2). $SA = \pi r^2 + \pi r s$

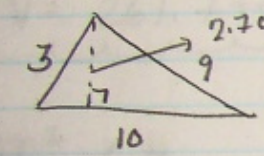
$= (3.14)(7)^2 + (3.14)(7)(15.7)$

$= (3.14)(49) + 345.086$

$= 153.86 + 345.086$

$= 498.946\ cm^2$

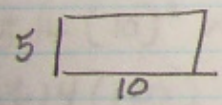
3)



$A = \frac{b \times h}{2}$

$A = \frac{10 \times 2.7}{2}$

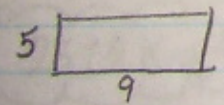
$A = 13.5 cm^2 \times 2 = 27 cm^2$



$A = l \times w$

$= 5 \times 10$

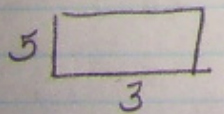
$= 50\ cm^2$



$A = l \times w$

$= 5 \times 9$

$= 45\ cm^2$



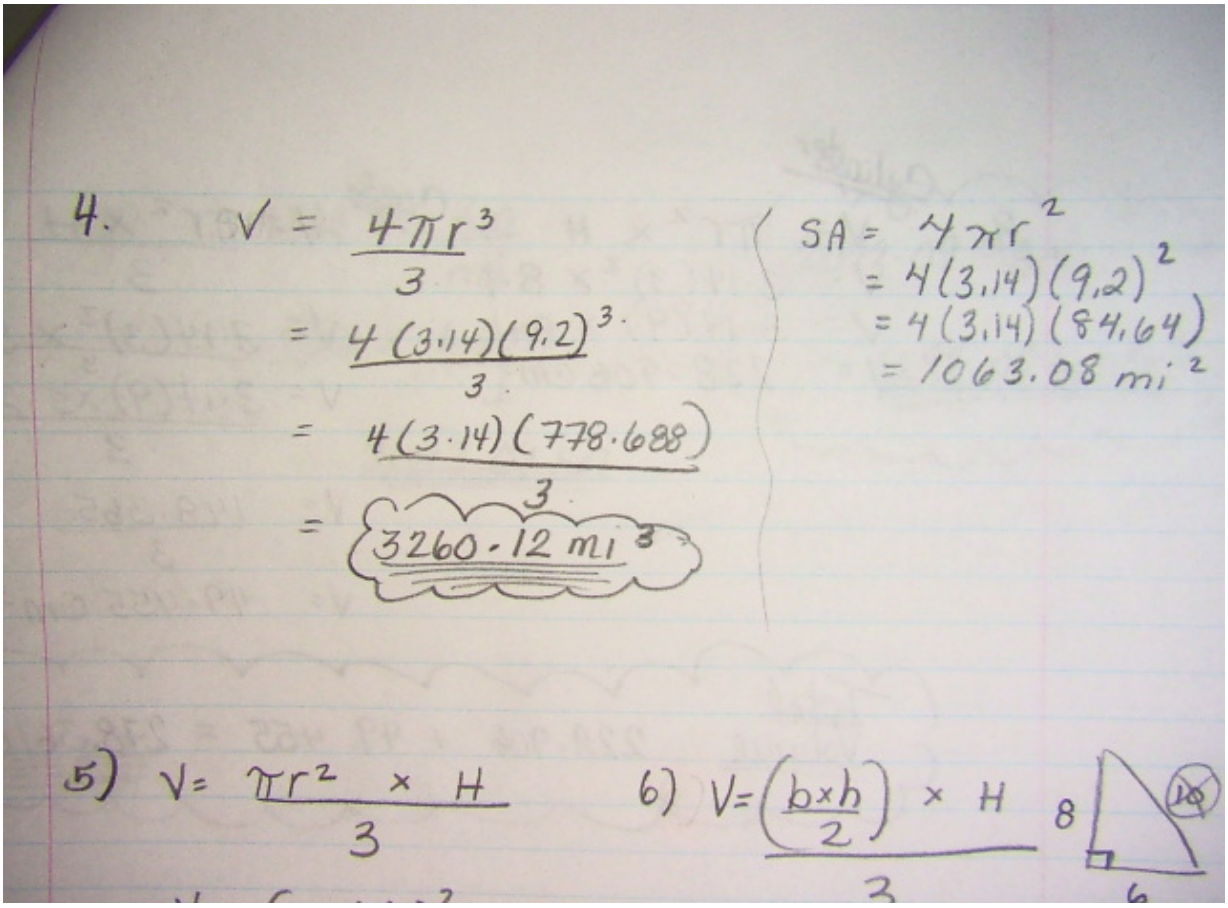
$A = l \times w$

$= 5 \times 3$

$= 15 cm^2$

27
50
+45
15

$= 137\ cm^2$



4. $V = \frac{4\pi r^3}{3}$

$= \frac{4(3.14)(9.2)^3}{3}$

$= \frac{4(3.14)(778.688)}{3}$

$= 3260.12 \text{ mi}^3$

$SA = 4\pi r^2$

$= 4(3.14)(9.2)^2$

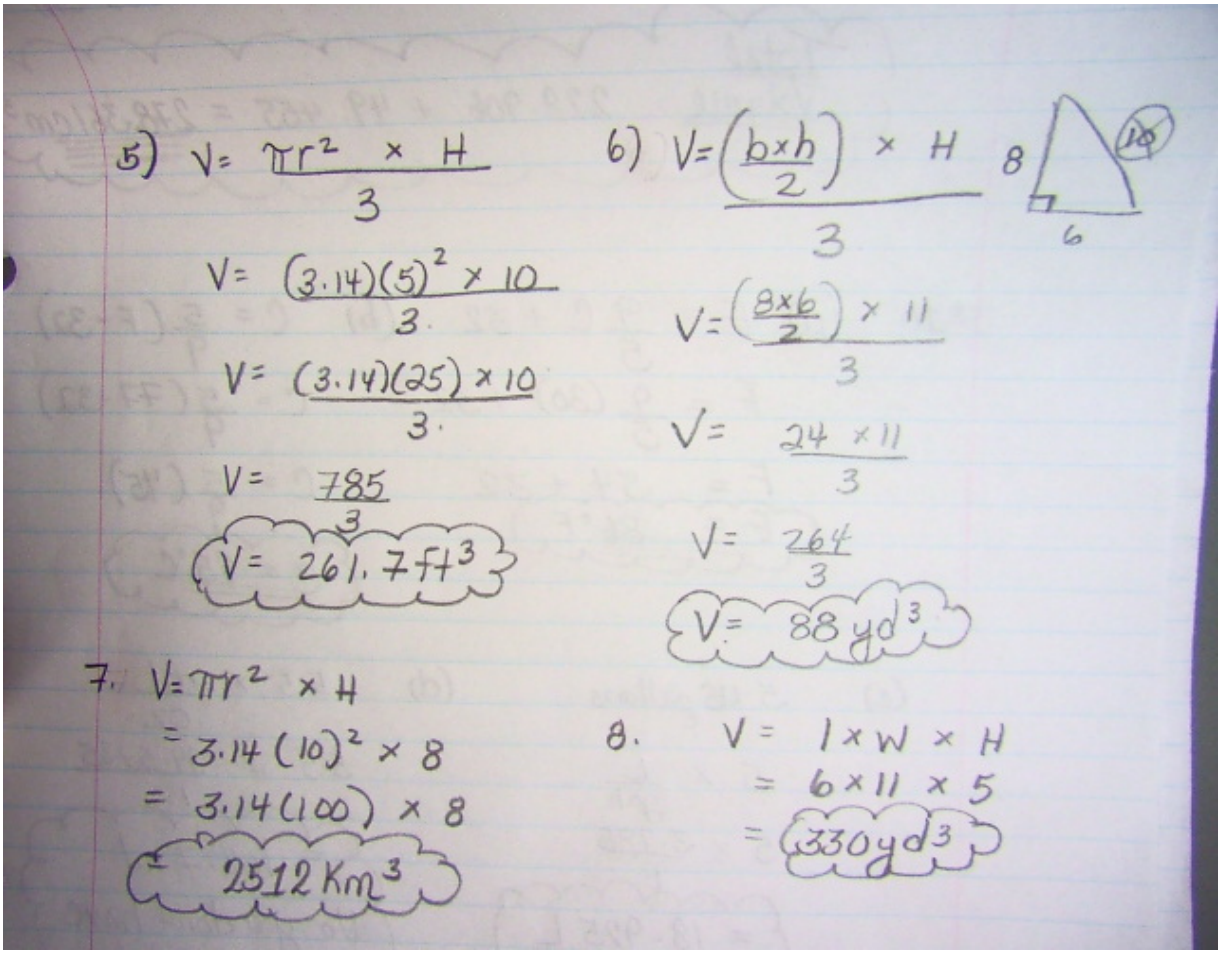
$= 4(3.14)(84.64)$

$= 1063.08 \text{ mi}^2$

5) $V = \frac{\pi r^2 \times H}{3}$

6) $V = \frac{\left(\frac{b \times h}{2}\right) \times H}{3}$

8, 10, 6



5) $V = \frac{\pi r^2 \times H}{3}$

$V = \frac{(3.14)(5)^2 \times 10}{3}$

$V = \frac{(3.14)(25) \times 10}{3}$

$V = \frac{785}{3}$

$V = 261.7 ft^3$

6) $V = \frac{\left(\frac{b \times h}{2}\right) \times H}{3}$

$V = \frac{\left(\frac{8 \times 6}{2}\right) \times 11}{3}$

$V = \frac{24 \times 11}{3}$

$V = \frac{264}{3}$

$V = 88 yd^3$

8 (10) 6

7. $V = \pi r^2 \times H$

$= 3.14 (10)^2 \times 8$

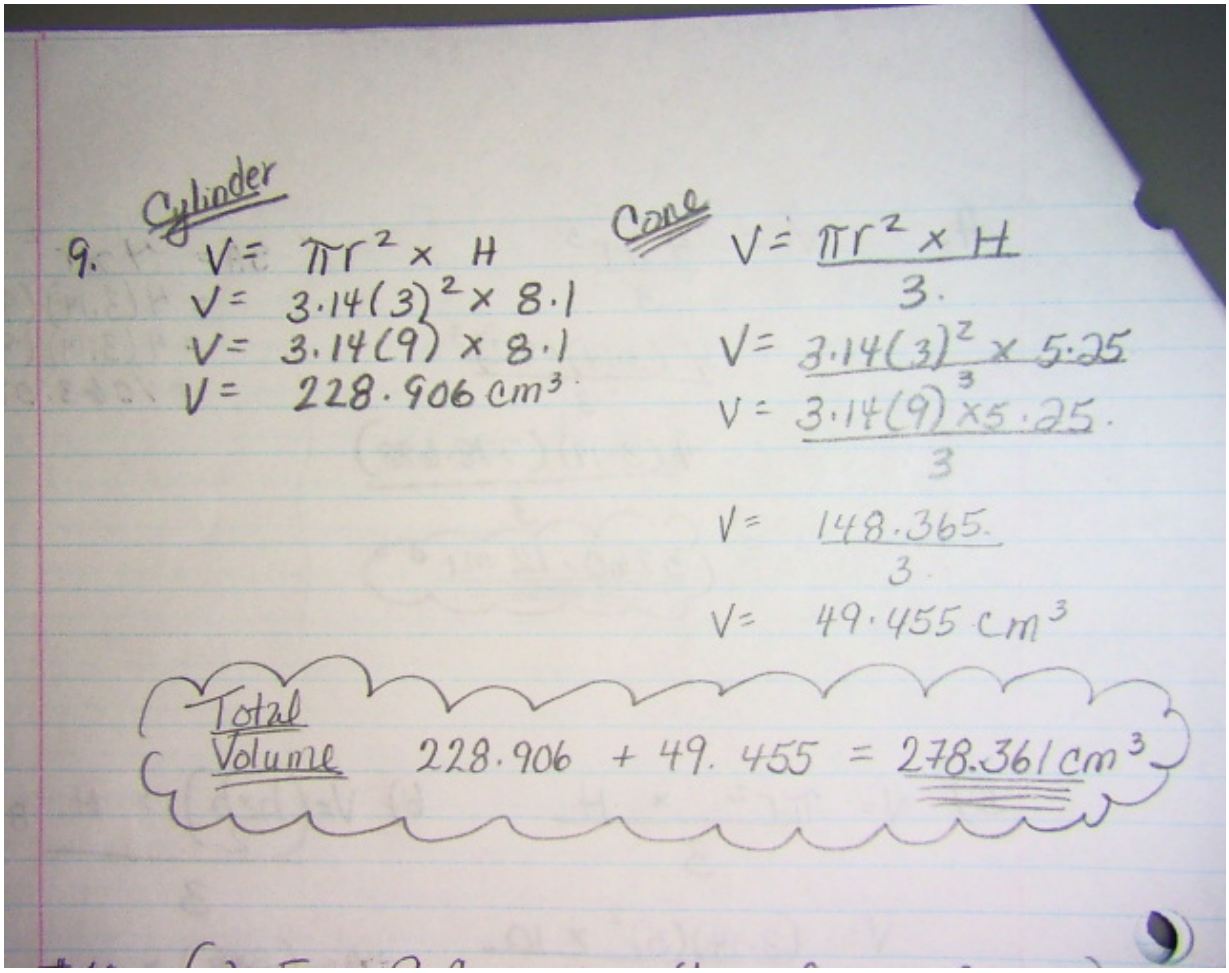
$= 3.14 (100) \times 8$

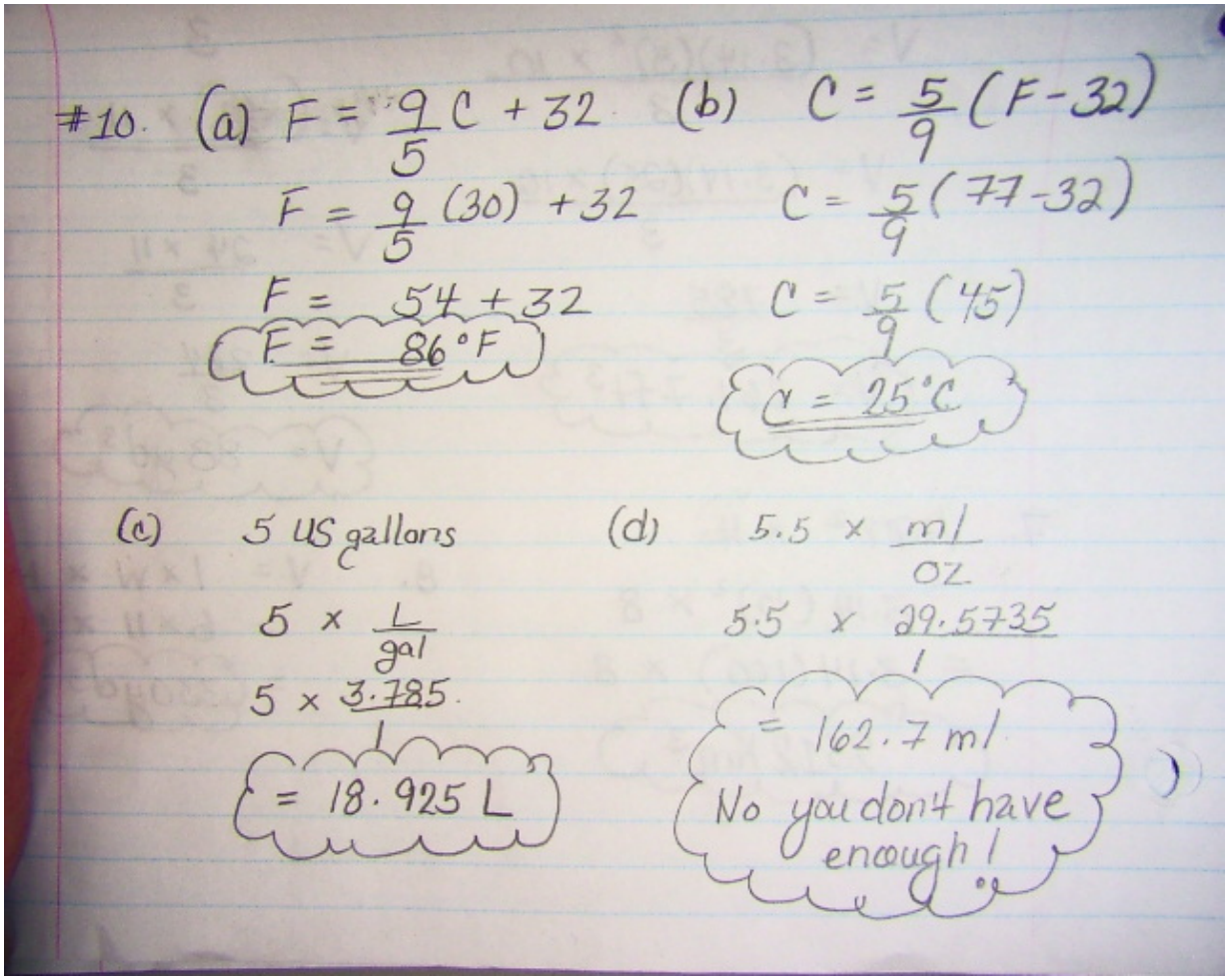
$2512 Km^3$

8. $V = l \times w \times H$

$= 6 \times 11 \times 5$

$= 330 yd^3$


9.
Cylinder
$V = \pi r^2 \times H$
$V = 3.14(3)^2 \times 8.1$
$V = 3.14(9) \times 8.1$
$V = 228.906\ cm^3$
Cone
$V = \frac{\pi r^2 \times H}{3}$
$V = \frac{3.14(3)^2 \times 5.25}{3}$
$V = \frac{3.14(9) \times 5.25}{3}$
$V = \frac{148.365}{3}$
$V = 49.455\ cm^3$
Total Volume
$228.906 + 49.455 = 278.361\ cm^3$



#10. (a) $F = \frac{9}{5}C + 32$

$F = \frac{9}{5}(30) + 32$

$F = 54 + 32$

$F = 86°F$

(b) $C = \frac{5}{9}(F - 32)$

$C = \frac{5}{9}(77 - 32)$

$C = \frac{5}{9}(45)$

$C = 25°C$

(c) 5 US gallons

$5 \times \frac{L}{gal}$

$5 \times \frac{3.785}{1}$

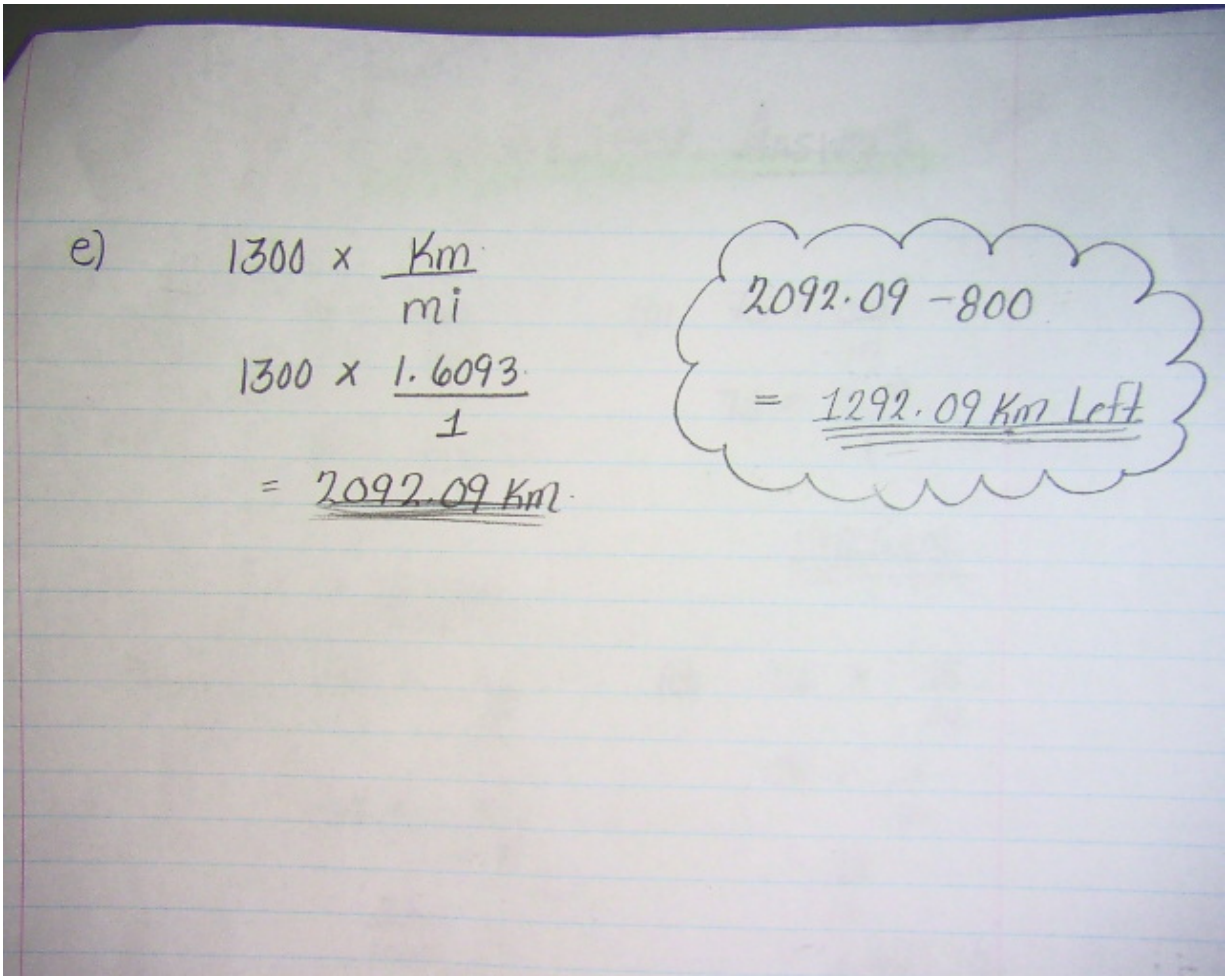
$= 18.925\ L$

(d) $5.5 \times \frac{ml}{oz}$

$5.5 \times \frac{29.5735}{1}$

$= 162.7\ ml$

No you don't have enough!


e)
1300 x Km/mi
1300 x 1.6093/1
= 2092.09 Km
2092.09 - 800
= 1292.09 Km Left