

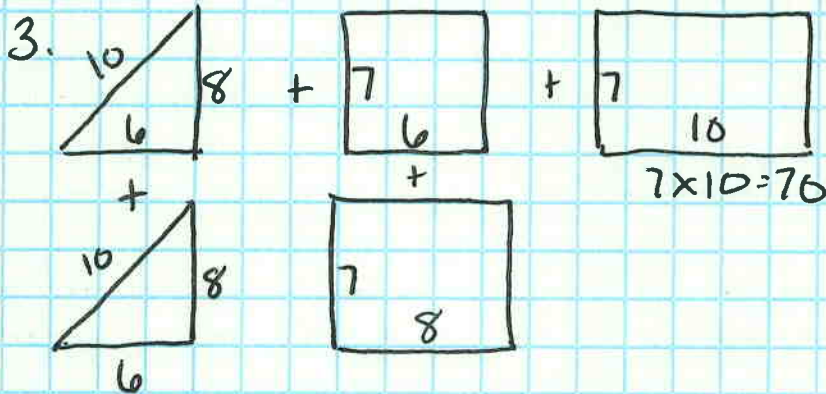
10-2-1 Surface Area

466: 1-3, 6-7, 9, 10, 12

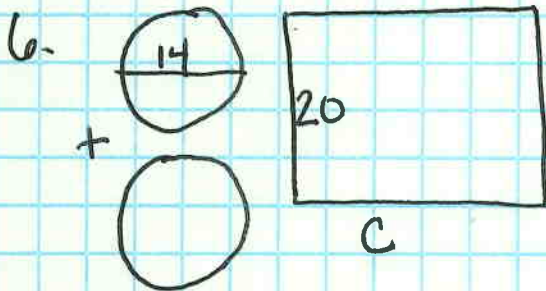
1. Plan $\square + \square + \square + \square + \square + \square$
 $b \quad b \quad f \quad f \quad f \quad f$
 $25 + 25 + 25 + 25 + 25 + 25 = 150 \text{ cm}^2$



$333 + 333 + 1369 + 1369 + 333 + 333 = 4070 \text{ cm}^2$
 $1332 + 2738 = 4070 \text{ cm}^2$



$A = \frac{1}{2}bh$
 $= 24 + 24 + 42 + 56 + 70 = 216 \text{ cm}^2$



$A_0 = (7)^2\pi = 49\pi + 49\pi$

$A_{\square} = C \cdot 20 = 14\pi \cdot 20$
 $C = 14\pi \rightarrow = 280\pi$

Total Area = $378\pi \text{ cm}^2$
 $= 1187.5 \text{ cm}^2$

7. Regular hex

$$a = 12.1 \quad s = 14$$

$$h = 7 \quad n = 6$$



$$A_H = \frac{1}{2} san$$

$$= \frac{1}{2} (14)(12.1)(6)$$

$$= 508.2$$

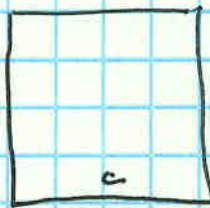
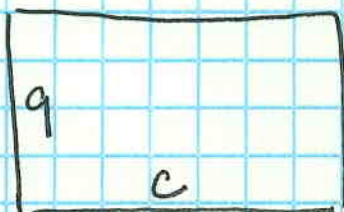
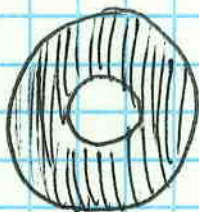
$$\begin{array}{r} 508.2 \\ + 508.2 \\ \hline 1016.4 \\ + 588 \end{array}$$

$$A_{\square} = 14 \times 7 = 98$$

$$98 \times 6 = 588$$

$$\boxed{1604.4 \text{ cm}^2}$$

9.



Top & Bottom

outside

inside

O-O

$$A = \pi(4)^2 - \pi(2)^2$$

$$= 16\pi - 4\pi$$

$$= 8\pi$$

$$C = 8\pi$$

$$c = 4\pi$$

$$A_{\square} = 9 \cdot 4\pi$$

$$= 36\pi$$

$$A_{\square} = 9 \cdot 8\pi$$

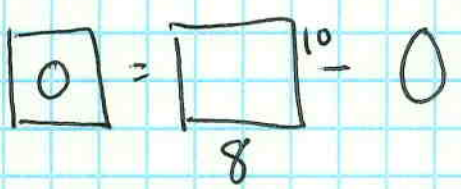
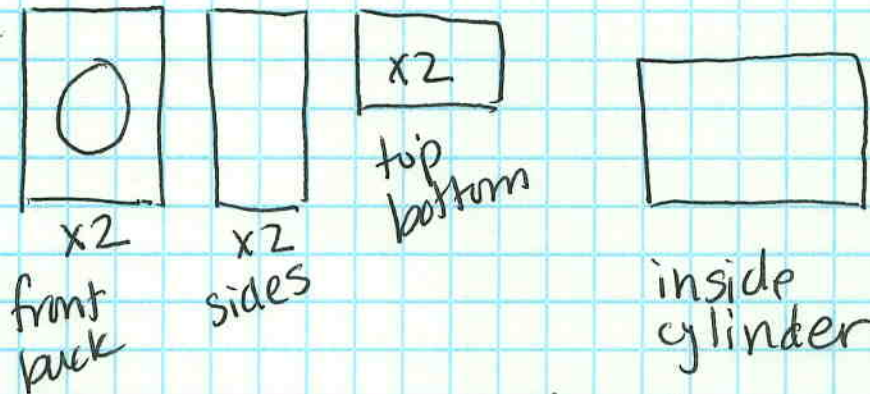
$$= 72\pi$$

$$\text{Total Area} = 8\pi + 8\pi + 72\pi + 36\pi$$

$$= 124\pi \text{ cm}^2$$

$$\approx 414.7 \text{ cm}^2$$

90.



$A_{\square} = 8 \cdot 10$
 $A_{\circ} = 2^2 \pi$

$A = 80 + 4\pi$
 $+ 80 - 4\pi$
 $160 - 8\pi$
 $+ 80$ (sides)
 $+ 64$ ($\pi/13$)
 $+ 24\pi$

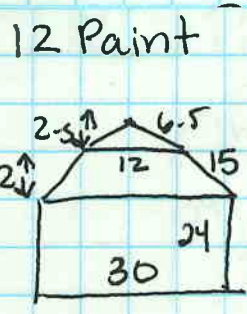
sides $A = 4 \times 10 = 40$

Tops $A = 8 \times 4 = 32$

cylinder $A = 0 + 0 + \boxed{c} W$
 $= 4\pi + 4\pi + 16\pi$
 $= 24\pi$

$C = 4\pi$
 $A = (4\pi)(4)$

Total Area = $204 + 16\pi \approx 329.1 \text{ cm}^2$



$A_{\square} = 24 \cdot 30 = 720 \text{ cm}$

sides 24
 40
 $A = 960$
 $\times 2 = 1920$

$A_{\triangle} = \frac{1}{2}(12+30)(24) = 252$

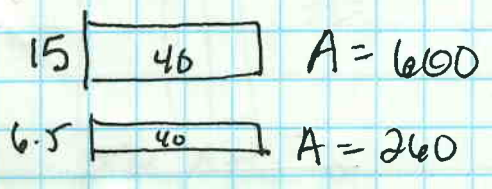
$A_{\triangle} = \frac{1}{2}(12)(25) = 15$

Total Paint Area = 3894 ft^2

$720 + 252 + 15 = 987$
 $\times 2 = 1974$
 ends

$3894 \div 250 = 15.57 \approx 16$
 $16 \times \$25 = \400 paint gallons

Roof



Total Roof = 860 ft^2
 $\times 2 = 1720$

16 bundles $\times 65 = 1170$
 $+ 400 = 1570$