Pg 512 solutions

$A_{sector} = \pi r^2 \left(\frac{M}{360}\right)$ | $A_{arc\ Length} = 2\pi r \left(\frac{M}{360}\right)$

1. $A = \pi 20^2 \left(\frac{105}{360}\right)\frac{7}{24}$

$= \pi 400 \left(\frac{7}{24}\right)$

$= 366.33\ cm^2$

2. $A = 16.2\pi$

$16.2\pi = \pi r^2 \left(\frac{36}{360}\right)\frac{1}{2}$

$5162 = r^2 \left(\frac{1}{8}\right)$

$81 = r^2$

$r = 9ft$

3. $A = \pi 9^2 \left(\frac{1}{6}\right)$

$= \pi 81 \left(\frac{1}{6}\right)$

$= 13.5\pi$ | $= 42.4\ in^2$

4. $A = \pi 14^2 \left(\frac{3}{4}\right)$

≈ 462

x2 b/c these are two shelves

$= 924\ in^2 = D$

$A_{sector} + A_\Delta$

5. $A = \pi 5^2 \left(\frac{3}{4}\right)$

$= \pi 25 \left(\frac{3}{4}\right)$

$= 58.88$

$A_\Delta = \frac{5 \cdot 5}{2} = 12.5$

$58.88 + 12.5 = 71.38 in^2$

$= H$

6. $A = \pi 3^2 \left(\frac{1}{2}\right)$

$= \pi 9 \left(\frac{1}{2}\right)$

$= 14.13$

x2

$= 28.26 = D$

7. $A = \pi 6^2 \cdot \left(\frac{3}{8}\right)$

$= \pi 36 \cdot \left(\frac{3}{8}\right)$

$= 42.39$

$V = 42.39 \times 3$

$= 127.17$

$= H$