

5.5

29

$$\frac{b-a}{n} = \frac{29}{6} = 4$$

$$\frac{b-a}{3n} = \frac{29}{18} = \frac{4}{3}$$

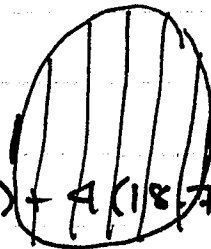
$$\frac{4}{3} [0 + 4(18.75) + 2(24) + 4(26) + 2(24) + 4(18.75) + 0]$$

11

$$\frac{20320}{2} \left[ 2(30+0) + 1.2(40+30) + 1.3(50+40) \right]$$

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29 |  $\frac{24}{6} = 4$        $\frac{b-a}{n}$



$\frac{4}{3} [0 + 4(18.75) + 2(24) + 4(26) + 2(24) + 4(18.75) + 0]$

$466.67 \text{ in}^2$

0	4	8	12	16	20	24
0	18.75					0

30 | 0    1    2    3    4    5    6  
 1.5 1.6 1.8 1.9 2.0 2.1 2.1

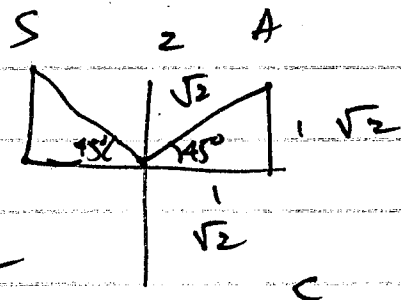
$\frac{b-a}{n} = 1$

$\frac{1}{3} [1.5 + 4(1.6) + 2(1.8) + 4(1.9) + 2(2) + 4(2.1) + 2.1]$   
 $= 11.2 \text{ ft}^2$

$5000 \text{ lb} \left( \frac{1}{42 \text{ lb/ft}^3} \right) (11.2 \text{ ft}^2) = 10.63 \text{ ft}$

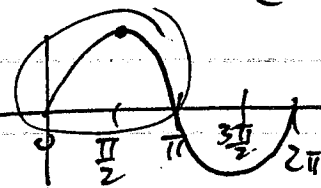
18 |  $\int_0^{\pi} \sin x \, dx$

$\frac{\pi - 0}{4} = \frac{\pi}{4}$

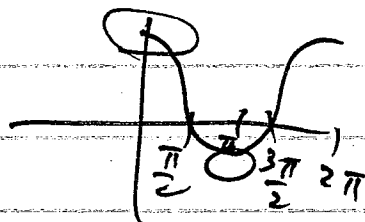


0	$\frac{\pi}{4}$	$\frac{\pi}{2}$	$\frac{3\pi}{4}$	$\pi$
0	$\frac{\sqrt{2}}{2}$	1	$\frac{\sqrt{2}}{2}$	0

$\frac{\pi}{12} [0 + 4(\frac{\sqrt{2}}{2}) + 2(1) + 4(\frac{\sqrt{2}}{2}) + 0]$   
 $\approx 2.605$



$\int_0^{\pi} -\cos x = -\cos \pi + \cos 0$   
 $-(-1) + 1 = 2$



5.5

g)

$$\frac{5}{2} [6 + 2(8.2) + 2(9.1) + 2(9.9) + 2(10.5) + 2(11) + 2(11.5) + 2(11.9) + 2(12.3) + 2(12.7) + 13.0]$$

$$= 533 \cdot 30 = 15,990 \text{ ft}^3$$

