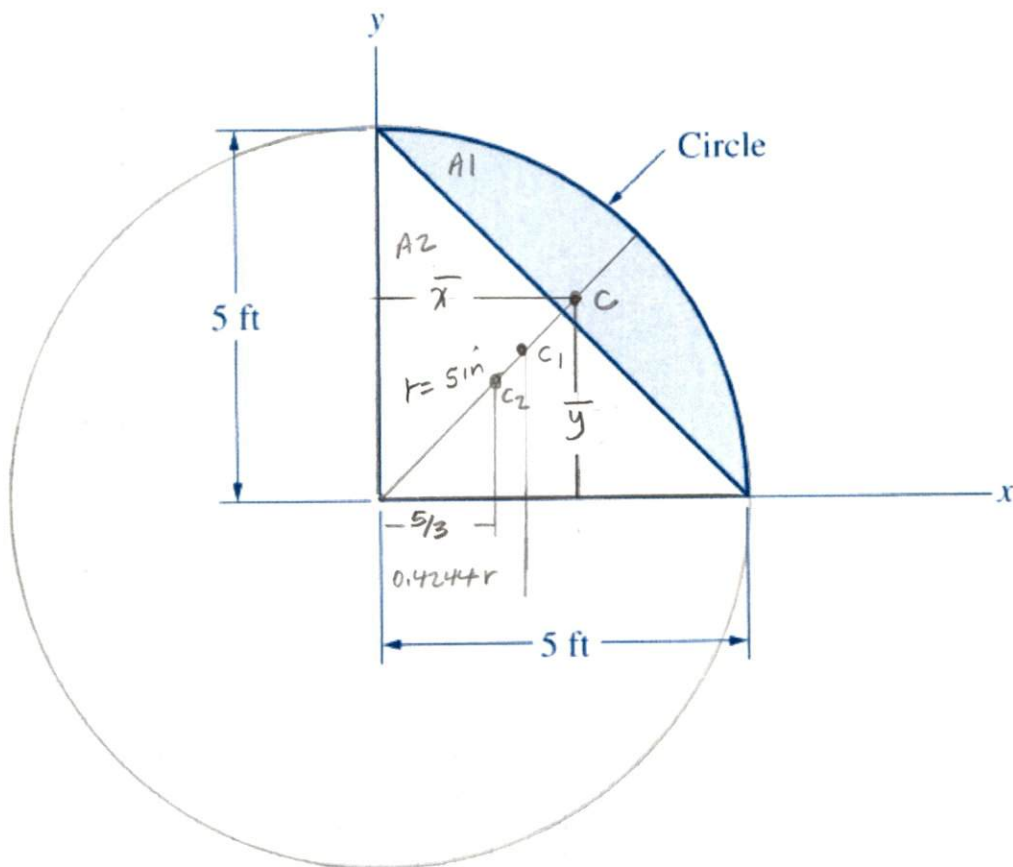


7-20
Solution.



The area is a quarter circle minus the area of the triangle. $\bar{x} = \bar{y}$

Shape	Area (ft ²)	\bar{x}	$A\bar{x}$ (ft ³)
A1	$\frac{\pi r^2}{4} = \frac{\pi (5)^2}{4} = 19.6$	$0.4244(5) = 2.1$	41.67
A2	$-\frac{1}{2}(5)(5) = -12.5$	1.67	-20.83
Σ	7.1		20.84

$$\bar{x} = \frac{\Sigma A\bar{x}}{\Sigma A} = \frac{20.84 \text{ ft}^3}{7.1 \text{ ft}} = \underline{\underline{2.94 \text{ ft}}}$$

$$\bar{y} = \underline{\underline{2.94 \text{ ft}}}$$