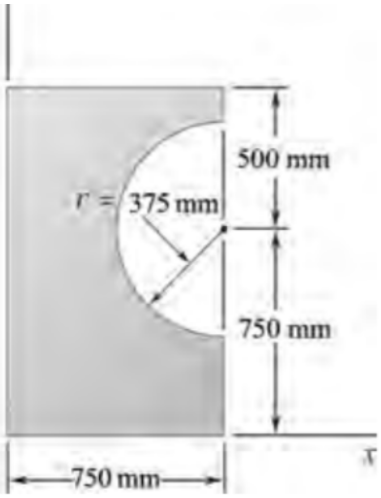
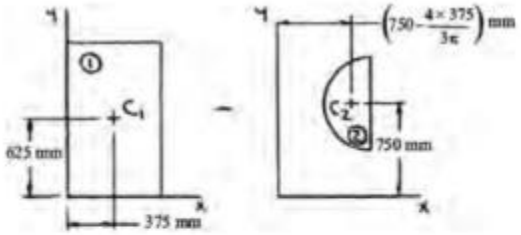
Locate the centroid of the plane area shown.





	A, mm^2	$\bar{x}$, mm	$\bar{y}$, mm	$\bar{x}A$, mm^3	$\bar{y}A$, mm^3
1	$750\times1200 = 0.9375\times10^6$	375	625	351.5625×10^6	585.9375×10^6
2	$-\frac{\pi}{2}(375)^2 = -0.22089\times10^6$	590.845	750	-130.512×10^6	-165.6675×10^6
Σ	0.71661×10^6			221.0505×10^6	420.27×10^6

Then

$$\bar{X} = \frac{\Sigma \bar{x}A}{\Sigma A} = \frac{221.0505\times10^6}{0.71661\times10^6} \qquad \bar{X} = 308 \text{ mm} \blacktriangleleft$$

$$\bar{Y} = \frac{\Sigma \bar{y}A}{\Sigma A} = \frac{420.27\times10^6}{0.71661\times10^6} \qquad \bar{Y} = 586 \text{ mm} \blacktriangleleft$$