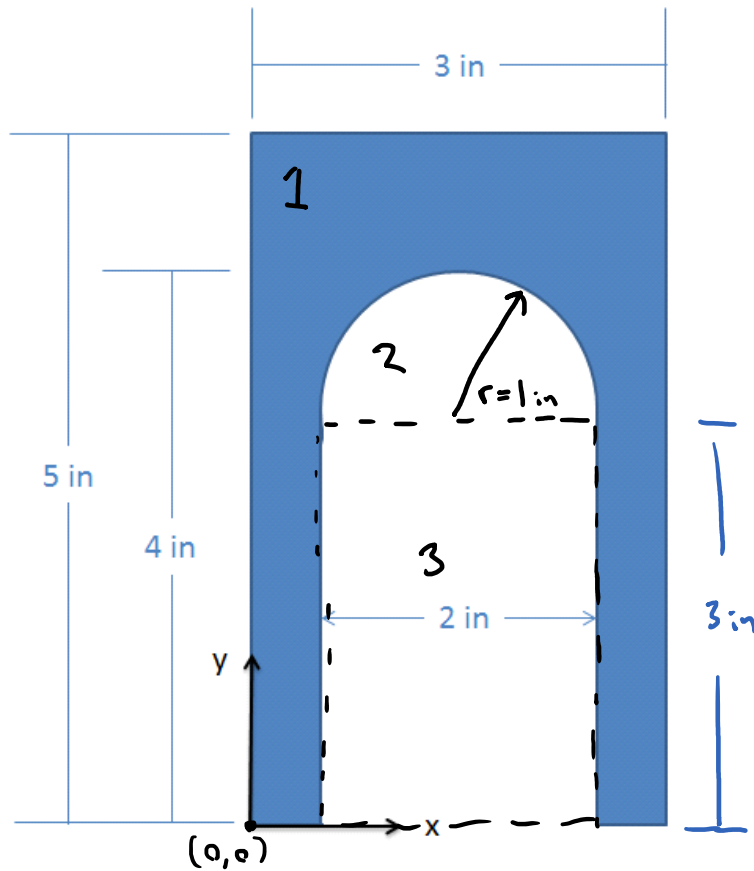


### Question 3

Find the x and y coordinates of the centroid of the shape shown below.



Shape	Area	$\bar{X}$	$\bar{Y}$
1	$15 \text{ in}^2$	$1.5 \text{ in}$	$2.5 \text{ in}$
2	$-1.57 \text{ in}^2$	$1.5 \text{ in}$	$3.42 \text{ in}$
3	$-6 \text{ in}^2$	$1.5 \text{ in}$	$1.5 \text{ in}$

$$\bar{X} = \frac{(15)(1.5) - (1.57)(1.5) - (6)(1.5)}{15 - 1.57 - 6} = 1.5 \text{ in}$$

$$\bar{Y} = \frac{(15)(2.5) - (1.57)(3.42) - (6)(1.5)}{15 - 1.57 - 6} = 3.11 \text{ in}$$

Solution:

$$\bar{X} = 1.5 \text{ in} \quad \bar{Y} = 3.11 \text{ in}$$