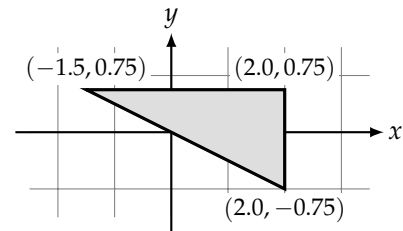
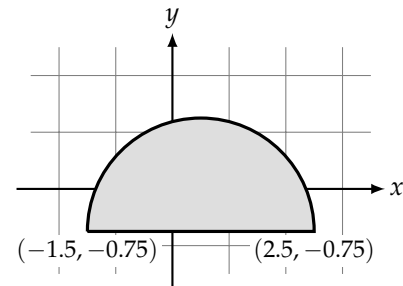


# Engineering Statics - 04 Centroids

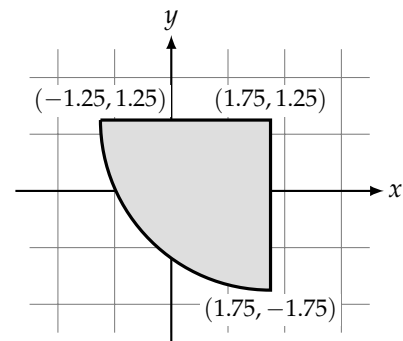
Exercise 1: Determine the coordinates of the centroid of the triangle shown.



Exercise 2: Determine the coordinates of the centroid of the semi-circle shown.

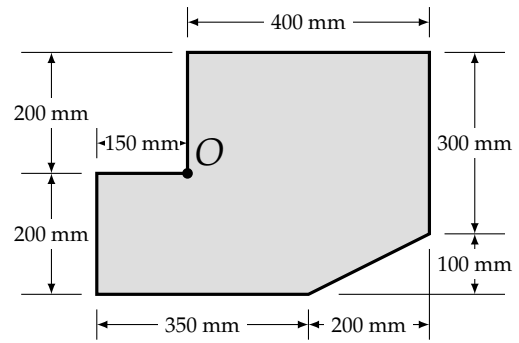


Exercise 3: Determine the location of the centroid of the quarter-circle shown.



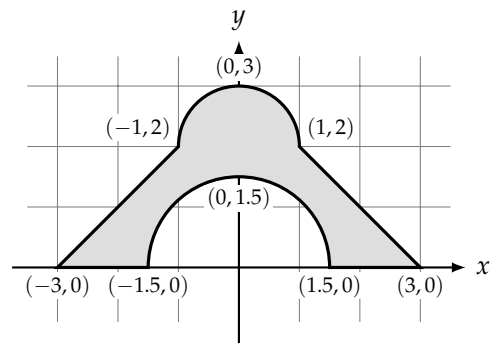
#### Exercise 4

Find the location of the centroid,  $C$ , relative to the point  $O$ .



Exercise 5

Find the location of the centroid,  $C$ , relative to the coordinate origin.



### Exercise 6

Three C130X13 channels and a steel plate  
(15mm × 174mm) are welded together.

Determine the location of the centroid, relative to the  
bottom left hand corner of the composite area.

Properties for C130X13:

Area = 1700 mm<sup>2</sup>

Depth = 127 mm

$\bar{x} = 12$  mm

