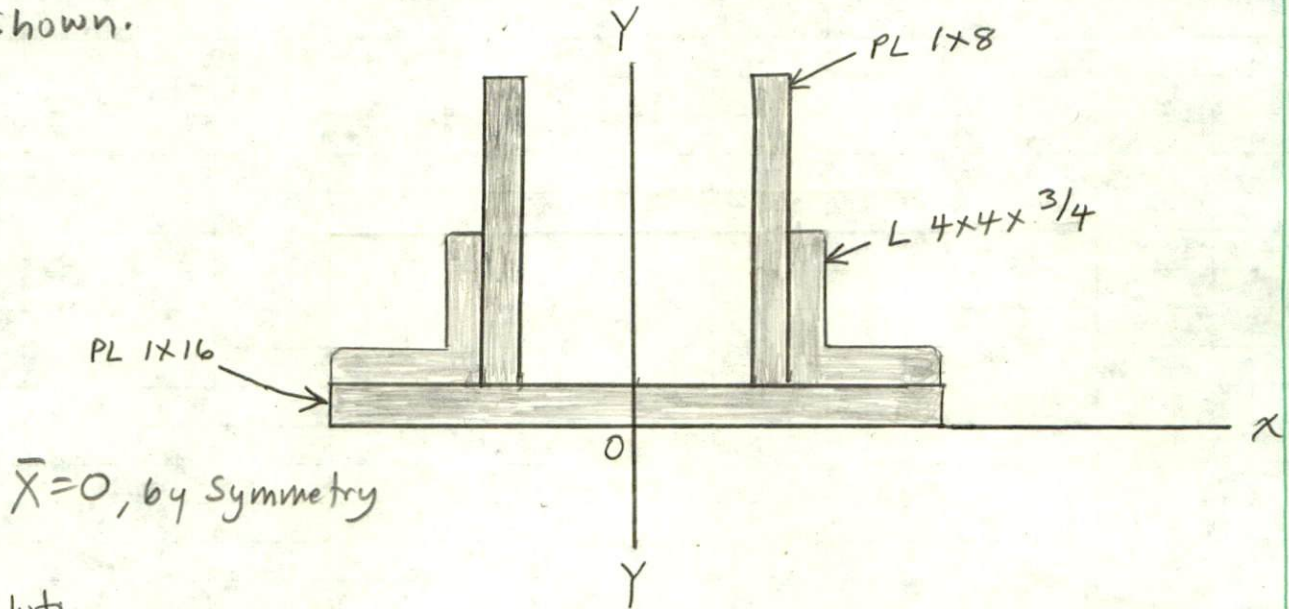


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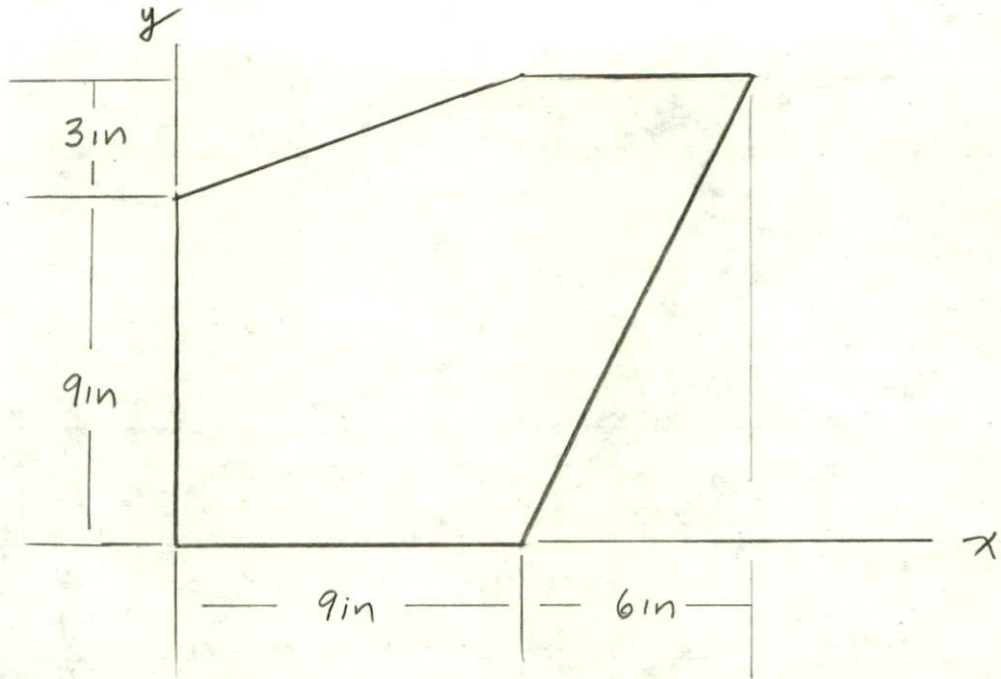
1. For the Built-Up structural steel section determine the location of the centroid for the Reference axis shown.



Solution.

SHAPE	A (in <sup>2</sup> )	y (in)	Ay (in <sup>3</sup> )
PL 1x16			
L 4x4x 3/4			
L 4x4x 3/4			
PL 1x8			
PL 1x8			
$\Sigma$		$\Sigma$	

2. Determine the centroid for the composite area for the given reference axis.



solution.

Shape	$A(\text{in}^2)$	$\bar{x}(\text{in})$	$A\bar{x}(\text{in}^3)$	$\bar{y}(\text{in})$	$A\bar{y}(\text{in}^3)$
$\Sigma$		$\Sigma$		$\Sigma$	