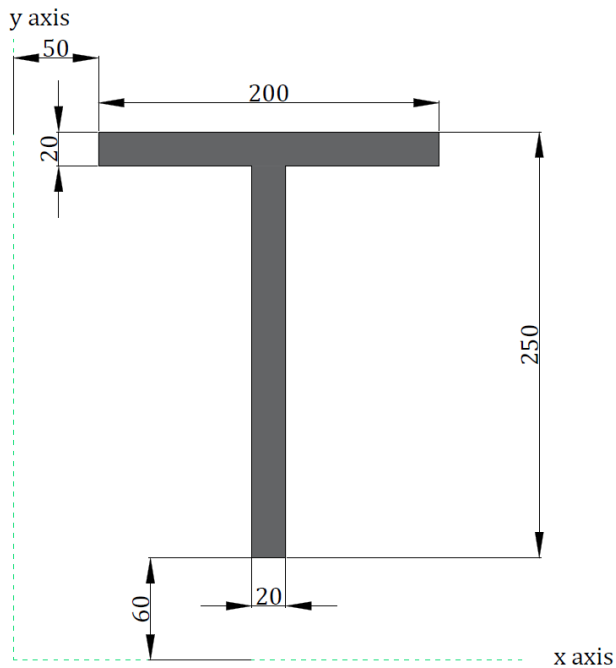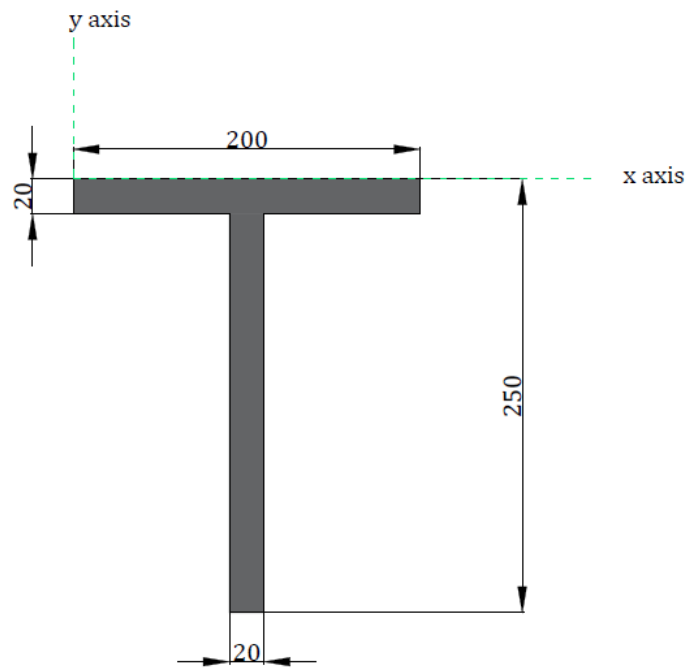Solutions to Q2, Q3 and Q4

Soln. to Q2: $(\bar{x}, \bar{y}) = (150, 233.139)$
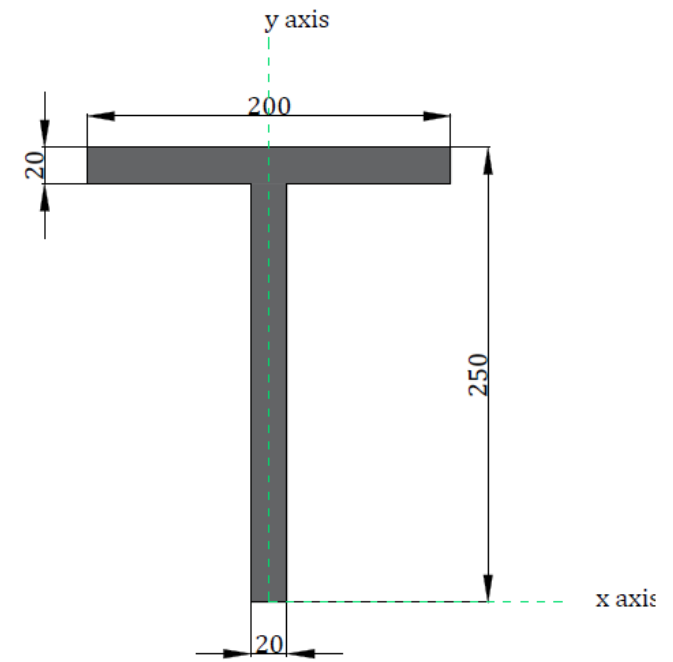
Comparison to solution to Q1:
Observe that $\bar{x} = 100 + 50 = 150$
and $\bar{y} = 173.139 + 60 = 233.139$

Soln. to Q3: $(\bar{x}, \bar{y}) = (100, -76.861)$

Observe that the centroid in this case lies in the 4th quadrant. x-coordinate of the centroid is positive and y-coordinate is negative

Soln. to Q4: $(\bar{x}, \bar{y}) = (0, 173.139)$

Observe that the reference y-axis happens to be axis of symmetry. Therefore, the centroid lies on the y-axis. That is why the x-coordinate is zero

The answer to the question – which reference axes system is the most convenient? – the answer is the reference axes system in Q4 as there is no need to determine the x-coordinate of the centroid because it lies on the axis of symmetry.