



18. The number of points, having both co-ordinates as integers, that lie in the interior of the triangle with vertices  $(0, 0)$ ,  $(0, 41)$  and  $(41, 0)$  is

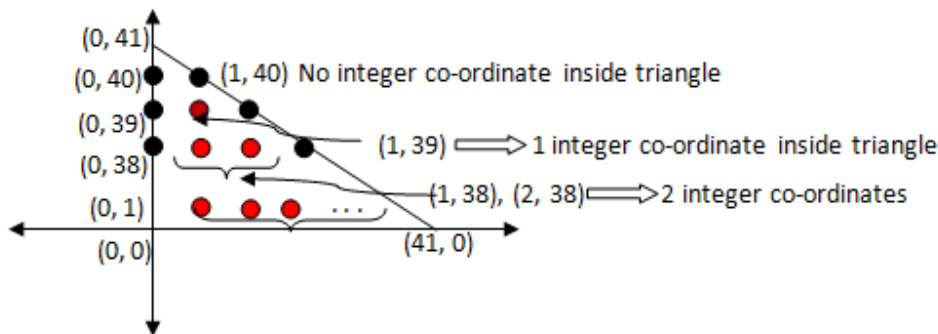
(1) 901

(2) 861

(3) 820

(4) 780

**Answer:**



therefore total number of points

$$1+2+3+\dots+39$$

$$= \frac{39 \times 40}{2} = 780$$

Here if we plot the graph we find integer co-ordinates falling in horizontal lines are 1, 2, 3, ..., 39

**Correct option is (4) 780**