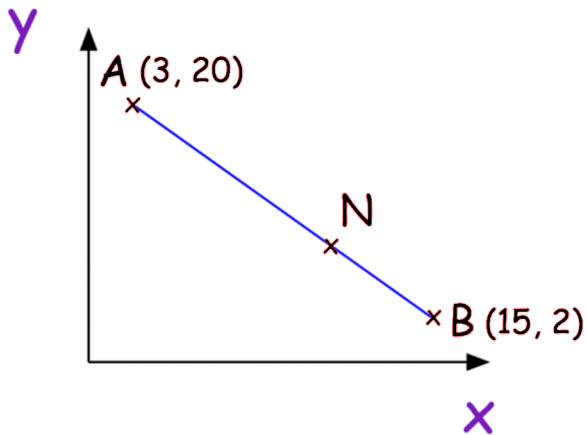




A is the point with coordinates (3, 20)
 B is the point with coordinates (15, 2)

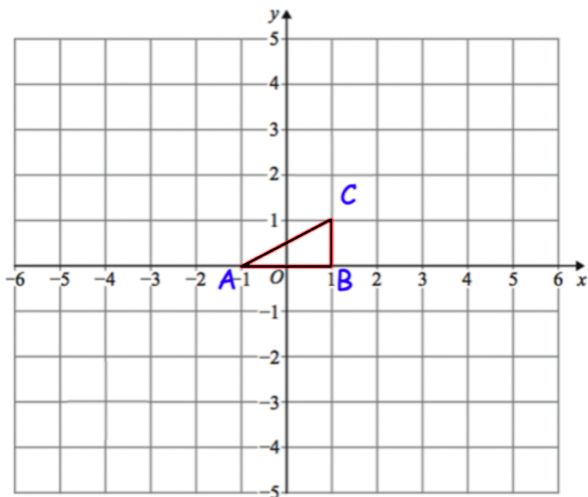
Find the coordinates of the point N.



N is a point of the line AB such that
 $AN : NB = 2 : 1$

A man jogs 200 metres to the nearest 10 metres.
 It takes him 30 seconds to the nearest 10 seconds.

Work out the error interval for his speed, s.



Shown is triangle ABC

ABC is rotated 180° about $(-1, 2)$
 and then

translated by the vector $\begin{pmatrix} 2 \\ -4 \end{pmatrix}$

Write down the coordinates of the invariant point.