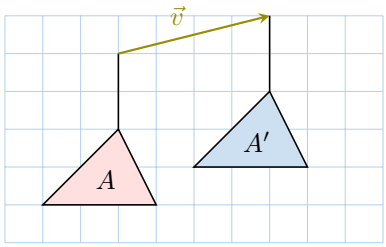
TRANSLATION

A DEFINITIONS

Discover: When an object is slid without rotation, all its points are moved according to a vector. This vector defines a direction and a magnitude.

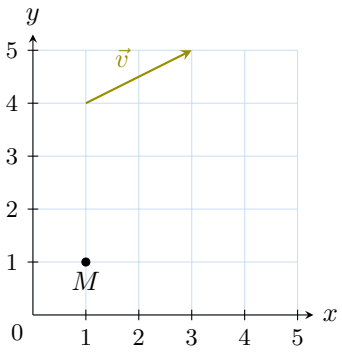


The cable car A' is the image of cable car A under the translation by vector $\vec{v}$.

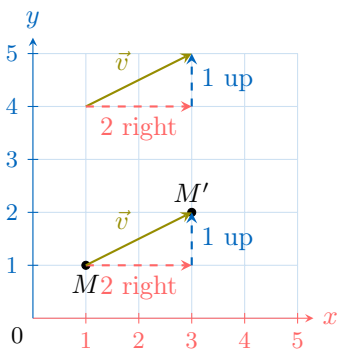
Definition **Translation of a Point**

The **translation** of point M by vector $\vec{v}$ is the point M' such that point M is moved to point M' by sliding along the direction and magnitude of the vector $\vec{v}$.

Ex: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



Answer:



$M'(3, 2)$

Definition **Translation**

The **translation** of an object by vector $\vec{v}$ is the translation of all its points.