

# TRANSLATION

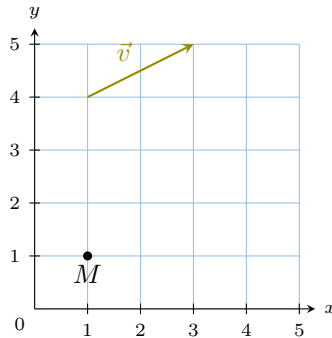
## A WHAT IS A TRANSLATION?

### Definition Translation of a Point

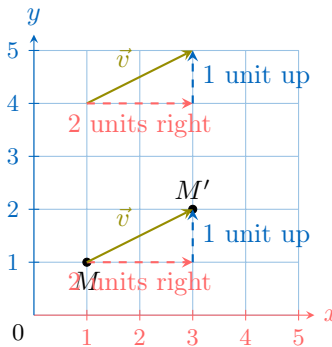
The **translation** of point  $M$  by vector  $\vec{v}$  is the point  $M'$  such that  $\overrightarrow{MM'} = \vec{v}$ : point  $M$  is slid to point  $M'$  following the direction and the length of the vector  $\vec{v}$ .



**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 figure obtained by translating all its points by the same vector  $\vec{v}$ .

