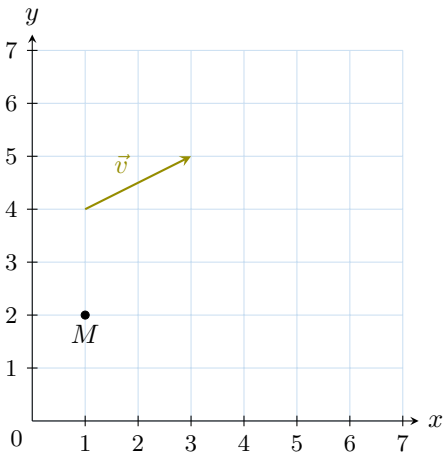
TRANSLATION

A DEFINITIONS

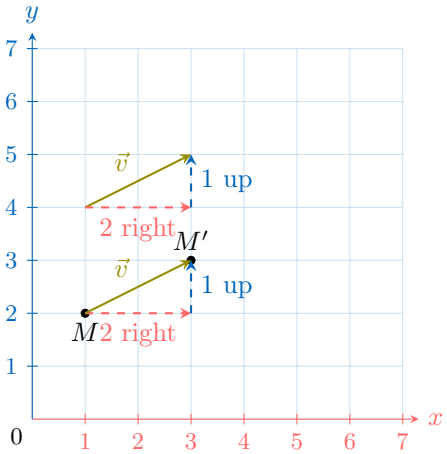
A.1 FINDING THE IMAGE OF A POINT

Ex 1: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



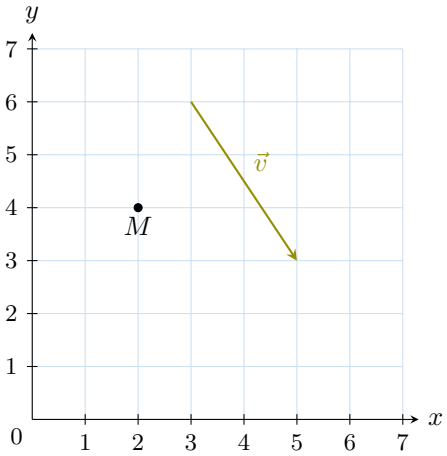
$M'(\boxed{3},\boxed{3})$

Answer:



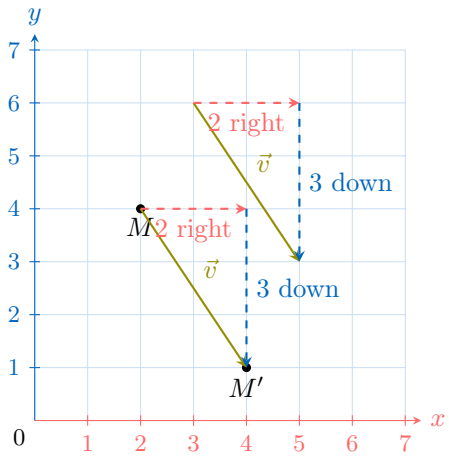
$M'(3,3)$

Ex 2: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



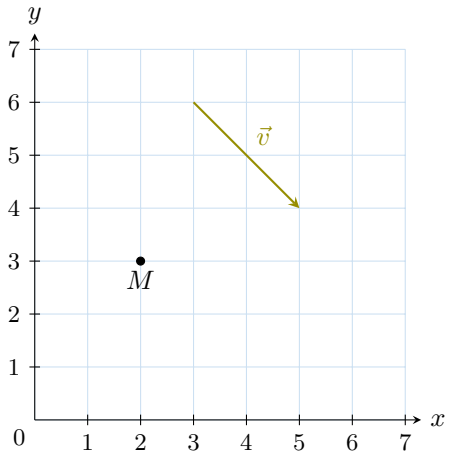
$M'(\boxed{4},\boxed{1})$

Answer:



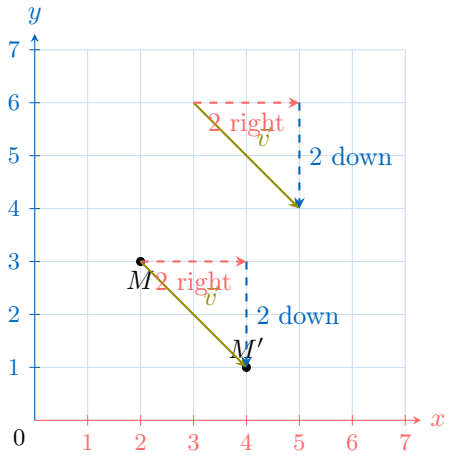
$M'(4,1)$

Ex 3: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



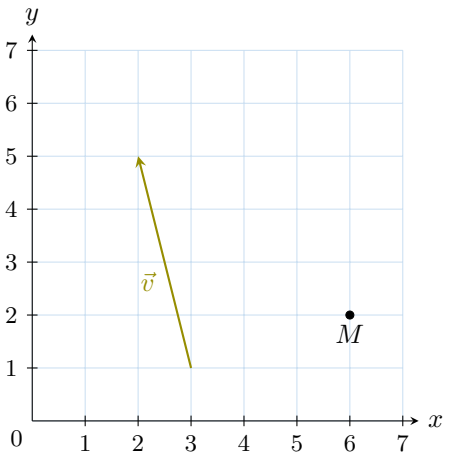
$M'(\boxed{4},\boxed{1})$

Answer:



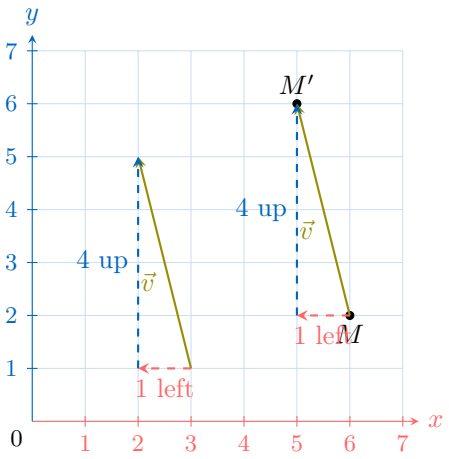
$M'(4,1)$

Ex 4: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



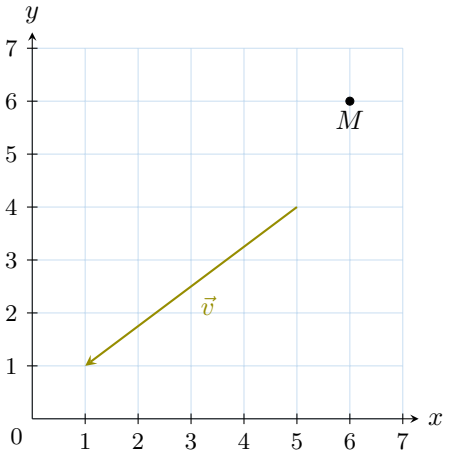
$M'(\boxed{5},\boxed{6})$

Answer:



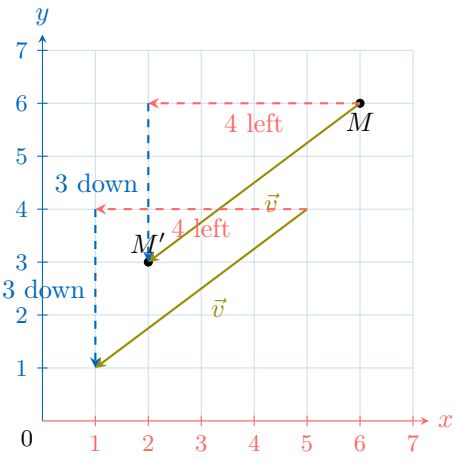
$M'(5,6)$

Ex 5: Find the coordinates of the image of point M under a translation by vector $\vec{v}$.



$M'(\boxed{2},\boxed{3})$

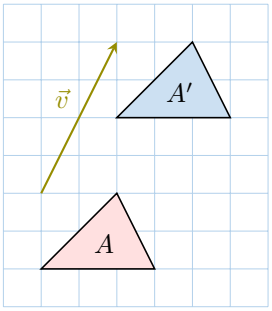
Answer:



$M'(2,3)$

A.2 TRANSLATION OF FIGURES

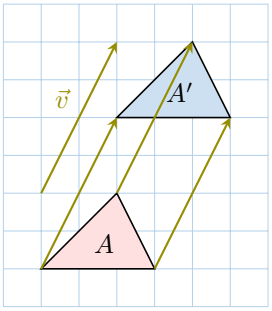
MCQ 6: Is the figure A' the image of figure A under a translation by vector $\vec{v}$?



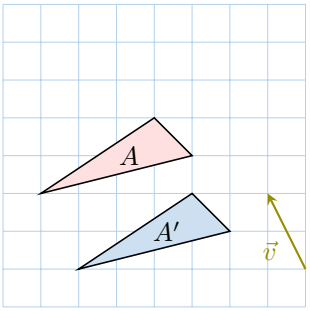
☒ Yes

☐ No

Answer: Yes



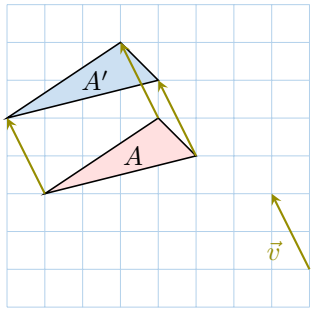
MCQ 7: Is the figure A' the image of figure A under a translation by vector $\vec{v}$?



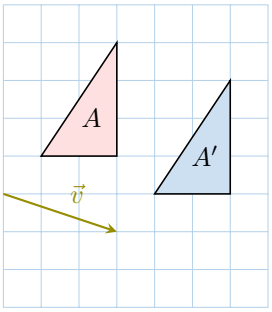
☐ Yes

☒ No

Answer: No, the figure A' is misplaced. Here is where it should be.



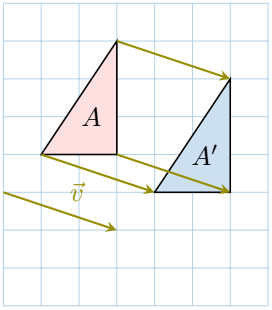
MCQ 8: Is the figure A' the image of figure A under a translation by vector $\vec{v}$?



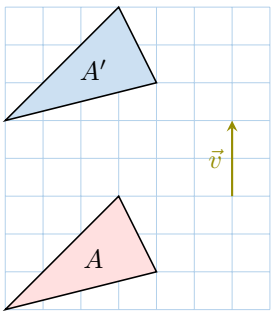
☒ Yes

☐ No

Answer: Yes



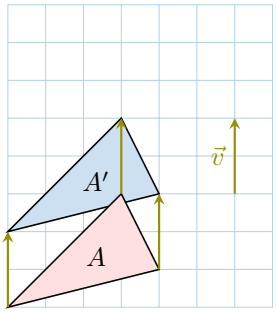
MCQ 9: Is the figure A' the image of figure A under a translation by vector $\vec{v}$?



☐ Yes

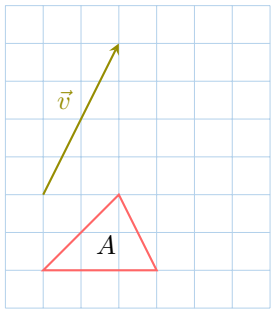
☒ No

Answer: No, the figure A' is misplaced. Here is where it should be.



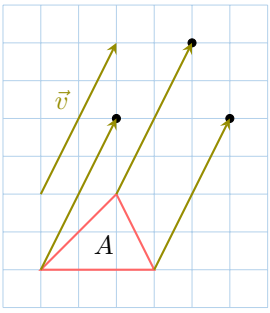
A.3 DRAWING IMAGES FIGURES

Ex 10: Draw the figure A', the image of figure A under a translation by vector $\vec{v}$.

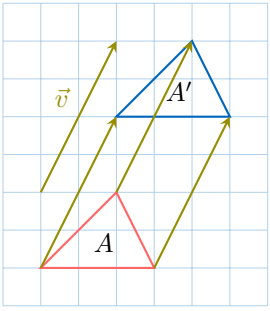


Answer:

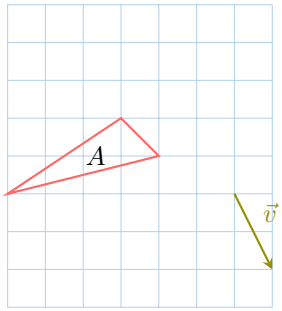
1. **Draw the image vertices**: For each vertex, translate it by the vector $\vec{v}$ by moving 2 units right and 4 units up from its original position. Place the new points on the grid.



2. **Draw the image figure**: Connect the image vertices with lines in the same order as the original figure.

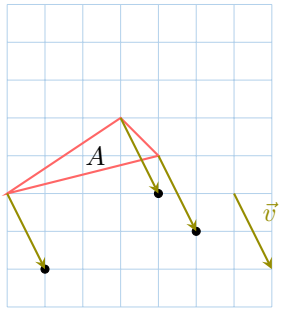


Ex 11: Draw the figure A', the image of figure A under a translation by vector $\vec{v}$.

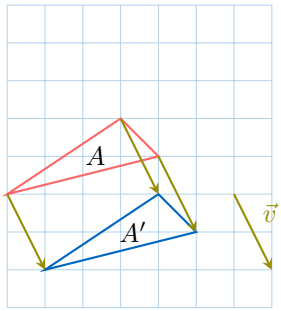


Answer:

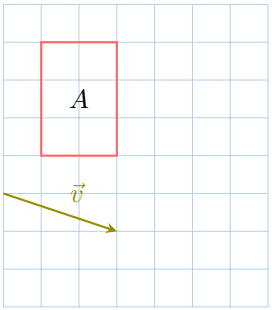
1. **Draw the image vertices**: For each vertex, translate it by the vector $\vec{v}$ by moving 1 unit right and 2 units down from its original position. Place the new points on the grid.



2. **Draw the image figure**: Connect the image vertices with lines in the same order as the original figure.

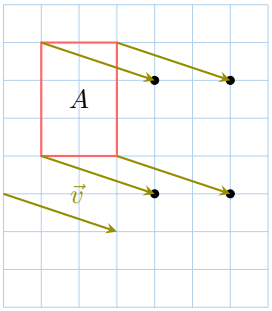


Ex 12: Draw the figure A', the image of figure A under a translation by vector $\vec{v}$.

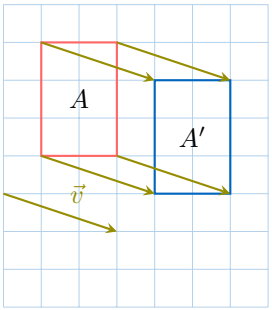


Answer:

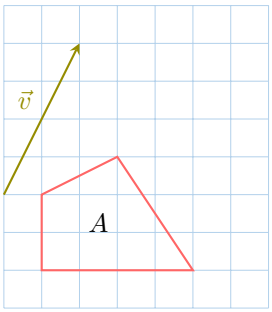
1. **Draw the image vertices**: For each vertex, translate it by the vector $\vec{v}$ by moving 3 units right and 1 unit down from its original position. Place the new points on the grid.



2. **Draw the image figure**: Connect the image vertices with lines in the same order as the original figure.

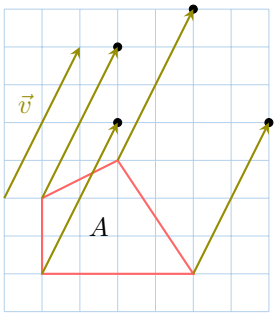


Ex 13: Draw the figure A', the image of figure A under a translation by vector $\vec{v}$.



Answer:

1. **Draw the image vertices**: For each vertex, translate it by the vector $\vec{v}$ by moving 2 units right and 4 units up from its original position. Place the new points on the grid.



2. **Draw the image figure**: Connect the image vertices with lines in the same order as the original figure.