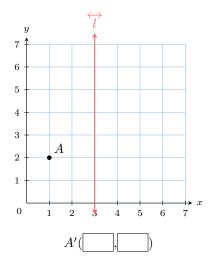
# REFLECTION

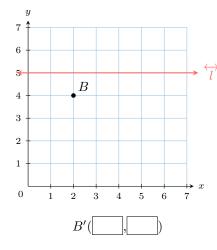
## **A DEFINITIONS**

#### A.1 FINDING THE IMAGE OF A POINT

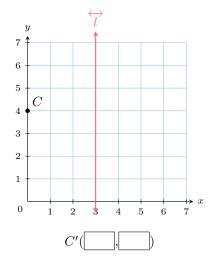
Ex 1: Find the coordinates of the image of point A under a reflection over line l.



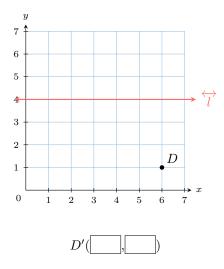
Ex 2: Find the coordinates of the image of point B under a reflection over line l.



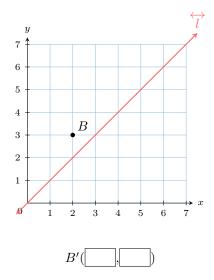
Ex 3: Find the coordinates of the image of point C under a reflection over line  $\overline{l}$ .



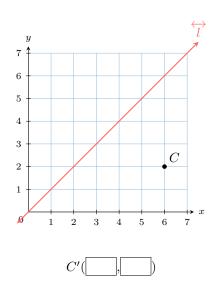
reflection over line  $\overrightarrow{l}$ .



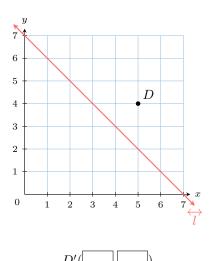
Ex 5: Find the coordinates of the image of point B under a reflection over the line l.



Ex 6: Find the coordinates of the image of point C under a reflection over the line l'.

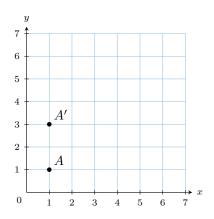


Ex 4: Find the coordinates of the image of point D under a Ex 7: Find the coordinates of the image of point D under a reflection over the line l.



A.2 FINDING THE LINE

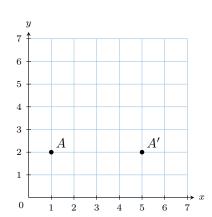
**Ex 8:** The point A' is the image of point A under a reflection over line  $\overrightarrow{BC}$ .



Find the coordinates of the points B and C

$$B(0, \square)$$
 and  $C(6, \square)$ 

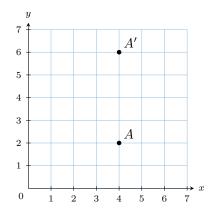
**Ex 9:** The point A' is the image of point A under a reflection over line  $\overrightarrow{BC}$ .



Find the coordinates of the points B and C

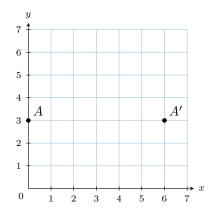
$$B( , 1)$$
 and  $C( , 4)$ 

**Ex 10:** The point A' is the image of point A under a reflection over line  $\overrightarrow{BC}$ .



Find the coordinates of the points B and C

**Ex 11:** The point A' is the image of point A under a reflection over line  $\overrightarrow{BC}$ .

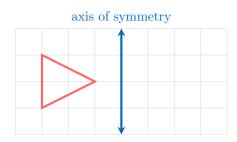


Find the coordinates of the points B and C

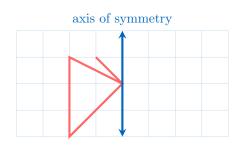
$$B(\boxed{\phantom{A}},1)$$
 and  $C(\boxed{\phantom{A}},5)$ 

#### A.3 DRAWING MIRROR FIGURES

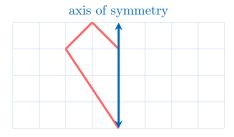
 $\mathbf{Ex}$  12: Draw the mirror figure.



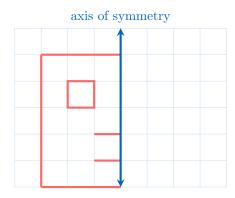
Ex 13: Draw the mirror figure.



Ex 14: Draw the mirror figure.

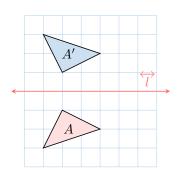


Ex 15: Draw the mirror figure.



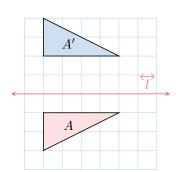
#### A.4 IDENTIFYING REFLECTIONS

 $\mathbf{MCQ}$  16: Is A' the image of A under the reflection over line  $\overrightarrow{l}$ ?



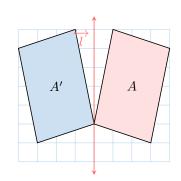
- $\square$  Yes
- $\square$  No

**MCQ 17:** Is A' the image of A under the reflection over line  $\{i'\}$ ?



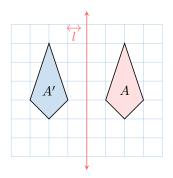
- □ Oui
- $\square$  Non

MCQ 18: Is A' the image of A under the reflection over line A'?



- $\square$  Yes
- □ No

MCQ 19: Is A' the image of A under the reflection over line A'?

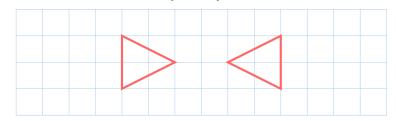


- □ Yes
- $\square$  No

## **B AXIS OF SYMMETRY**

### **B.1 DRAWING THE AXIS OF SYMMETRY**

Ex 20: Draw the axis of symmetry.



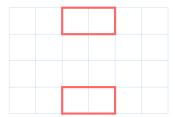
 $\mathbf{Ex}\ \mathbf{21:}\ \mathrm{Draw}\ \mathrm{the}\ \mathrm{axis}\ \mathrm{of}\ \mathrm{symmetry}.$ 



Ex 22: Draw the axis of symmetry.

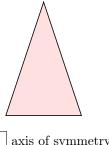


Ex 23: Draw the axis of symmetry.



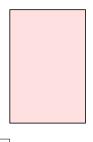
## **B.2 COUNTING AXES OF SYMMETRY**

Ex 24: Count the number of axes of symmetry for the isosceles triangle shown below.



axis of symmetry

 $\mathbf{Ex}\ \mathbf{25:}\ \mathbf{Count}\ \mathbf{the}\ \mathbf{number}\ \mathbf{of}\ \mathbf{axes}\ \mathbf{of}\ \mathbf{symmetry}\ \mathbf{for}\ \mathbf{the}\ \mathbf{rectangle}$ shown below.



axes of symmetry

 $\mathbf{Ex}$  26: Count the number of axes of symmetry for the equilateral triangle shown below.



axes of symmetry

Ex 27: Count the number of axes of symmetry for the square shown below.



axes of symmetry