Class Work: Reflections

You need your notes and some graph paper.
Title the paper: Reflections

I will check your work at the end of class.

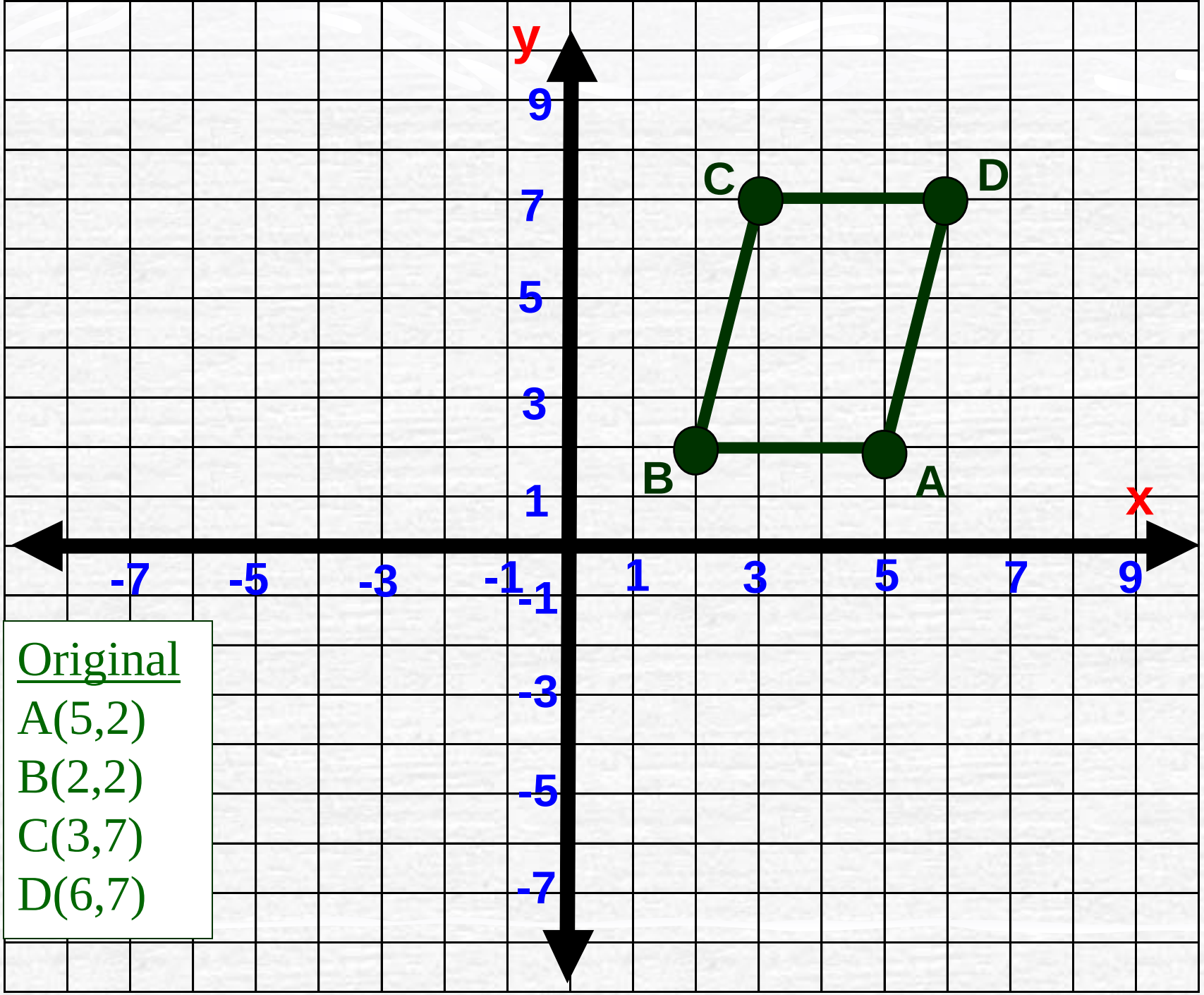
Reflections

- Reflection – a transformation that flips a figure across a line (line of reflection)
- A mirror image is formed

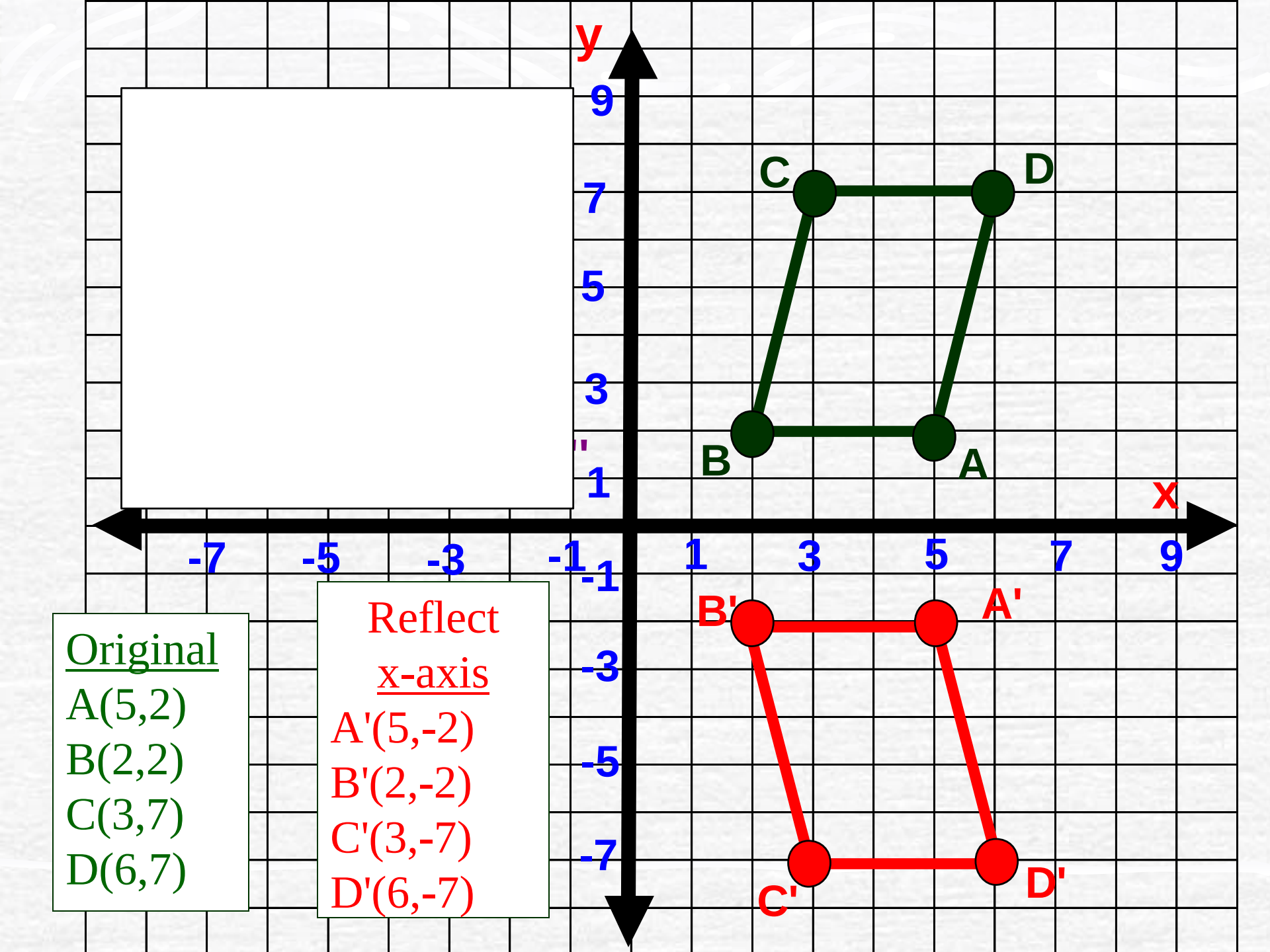

AMBULANCE
Y200 AMB

Reflections

- Size and shape of the figure remain the same
- The coordinates of the figure's vertices are different



Original
A(5,2)
B(2,2)
C(3,7)
D(6,7)

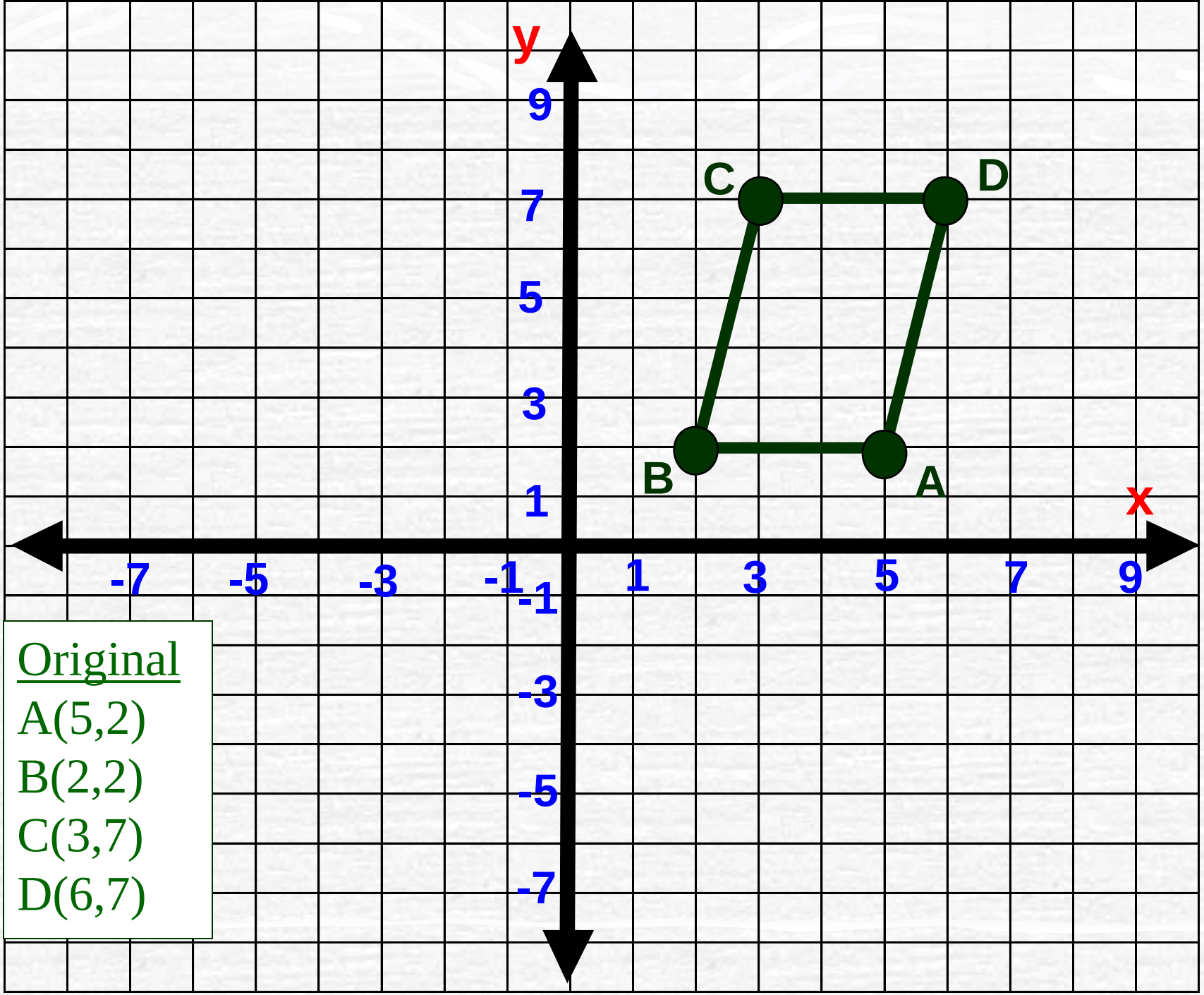


Original
A(5,2)
B(2,2)
C(3,7)
D(6,7)

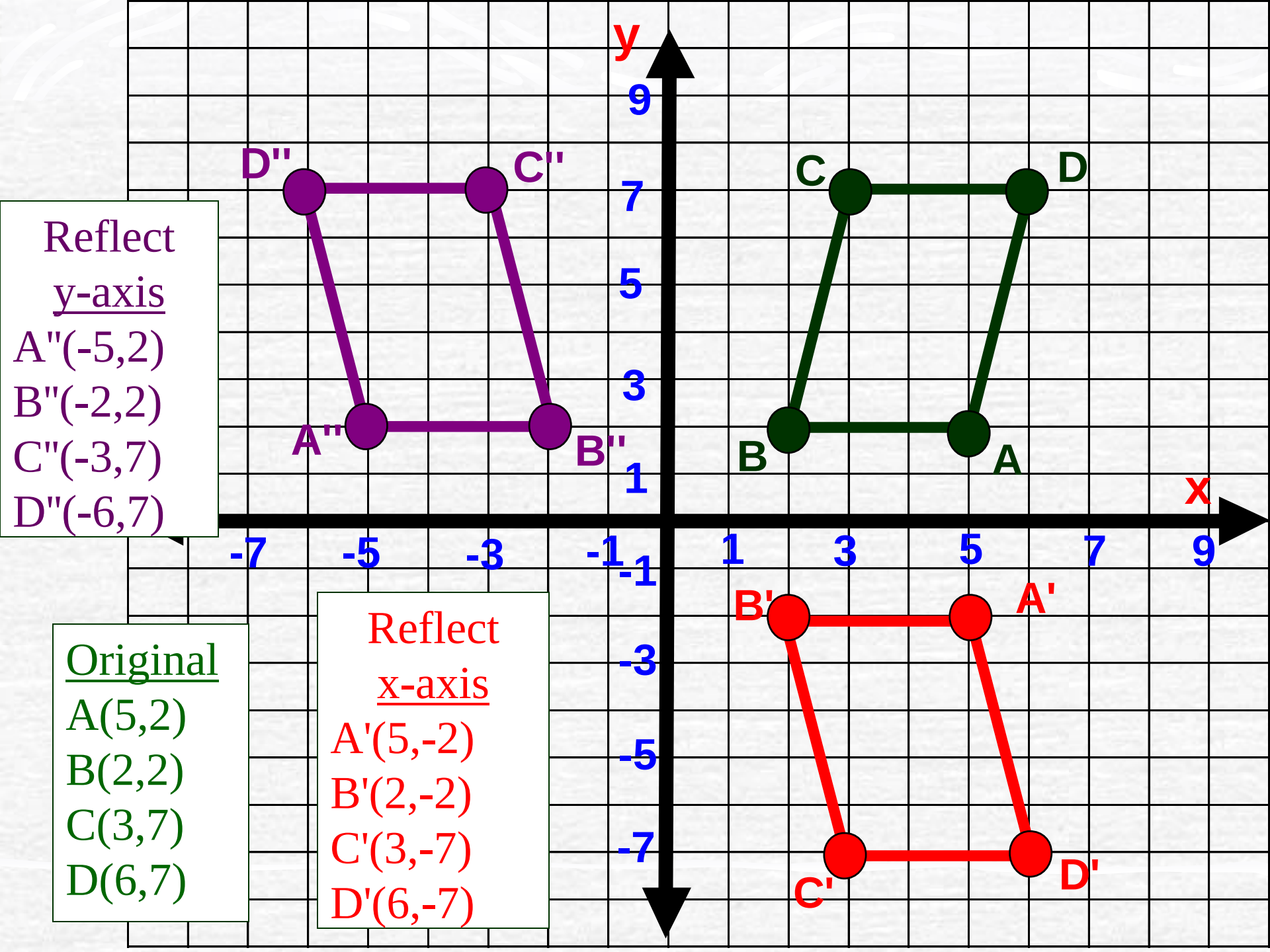
Reflect
x-axis
A'(5,-2)
B'(2,-2)
C'(3,-7)
D'(6,-7)

Reflections

- When reflected across the x-axis, the values of the image will:
  - The x-values remain the same.
  - The y-values are opposite.
  - $A(2,5)$ $A'(2,-5)$



Original
A(5,2)
B(2,2)
C(3,7)
D(6,7)


Reflect
y-axis
A"(-5,2)
B"(-2,2)
C"(-3,7)
D"(-6,7)
Original
A(5,2)
B(2,2)
C(3,7)
D(6,7)
Reflect
x-axis
A'(5,-2)
B'(2,-2)
C'(3,-7)
D'(6,-7)
y
x
9
7
5
3
1
-1
-3
-5
-7
-7
-5
-3
-1
1
3
5
7
9
D"
C"
A"
B"
C
D
B
A
B'
A'
C'
D'

Reflections

- When reflected across the y-axis, the values of the image will:
  - The x-values are opposite.
  - The y-values remain the same.
  - $A(2,5)$ $A'(-2,5)$