

# Class Work: Translations

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

I will check your work at the end of class.

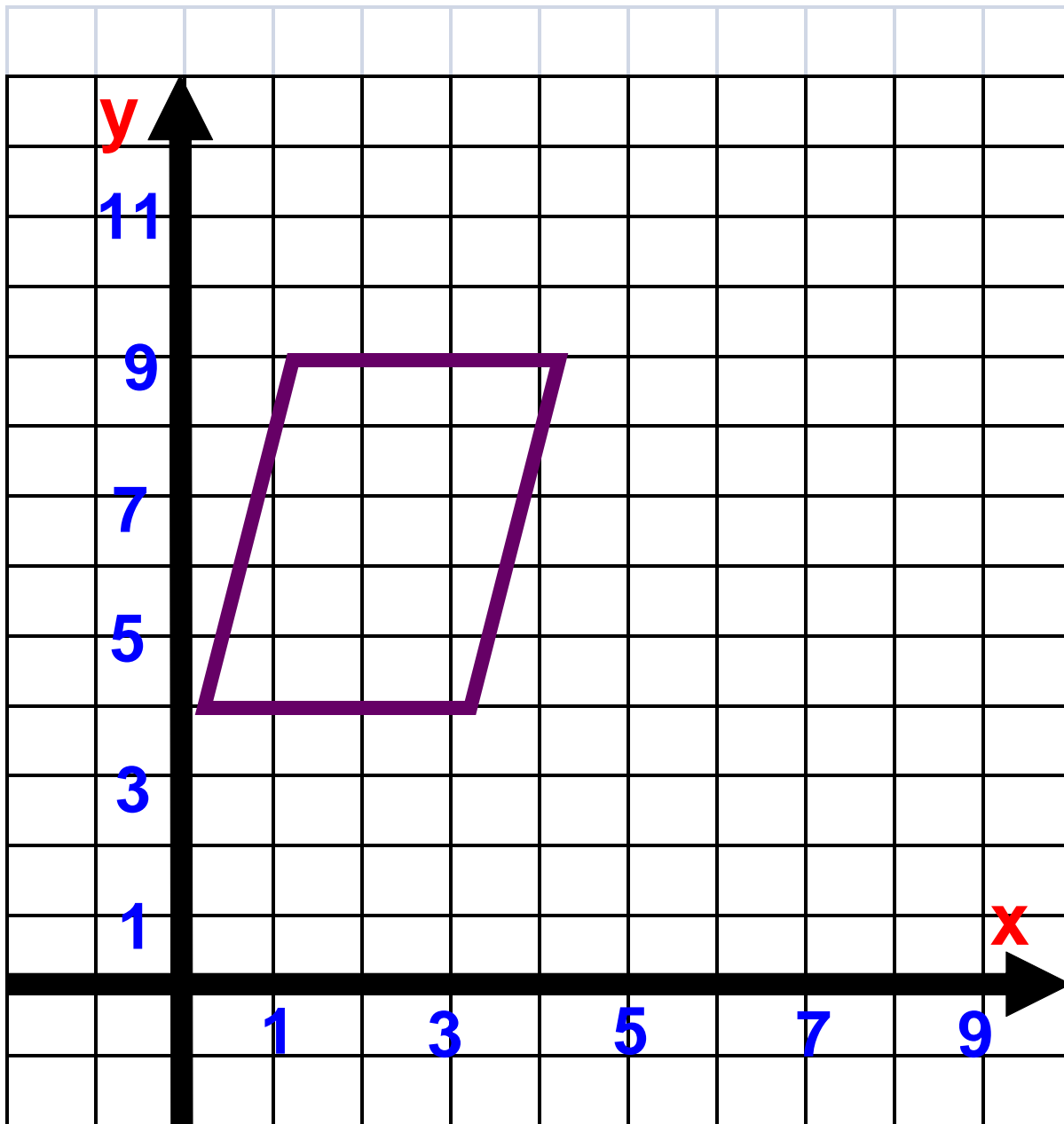


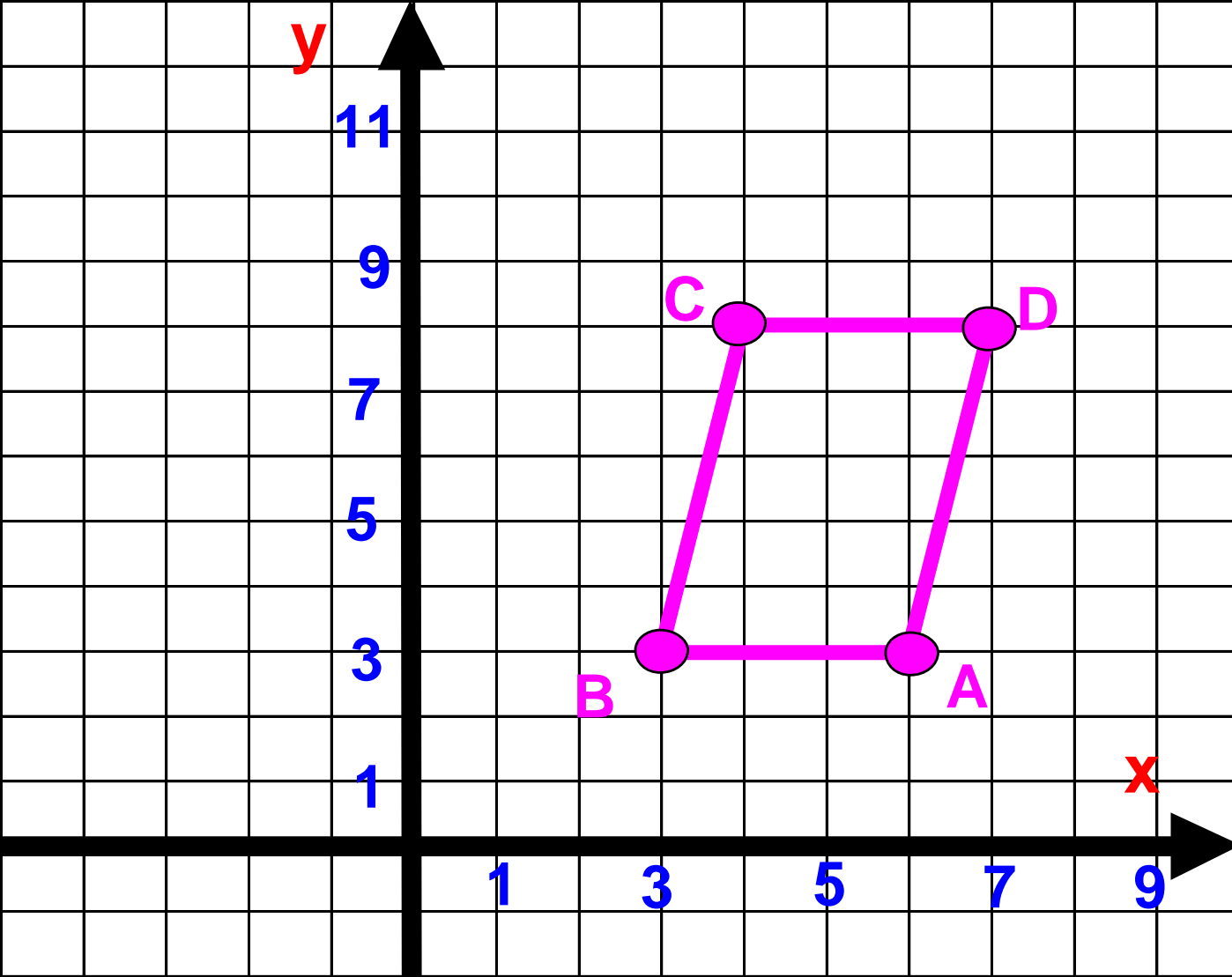
# Translations

- Translation - a transformation that slides figures around in the coordinate plane.
- The size or shape of the original figure is not changed.

# Translations

- All points of a figure will move the same # of places.





**Translate 2  
spaces to the  
right.**

**Translate up  
3 spaces.**

**Original**

**A(6,3)**

**B(3,3)**

**C(4,8)**

**D(7,8)**

**Image**

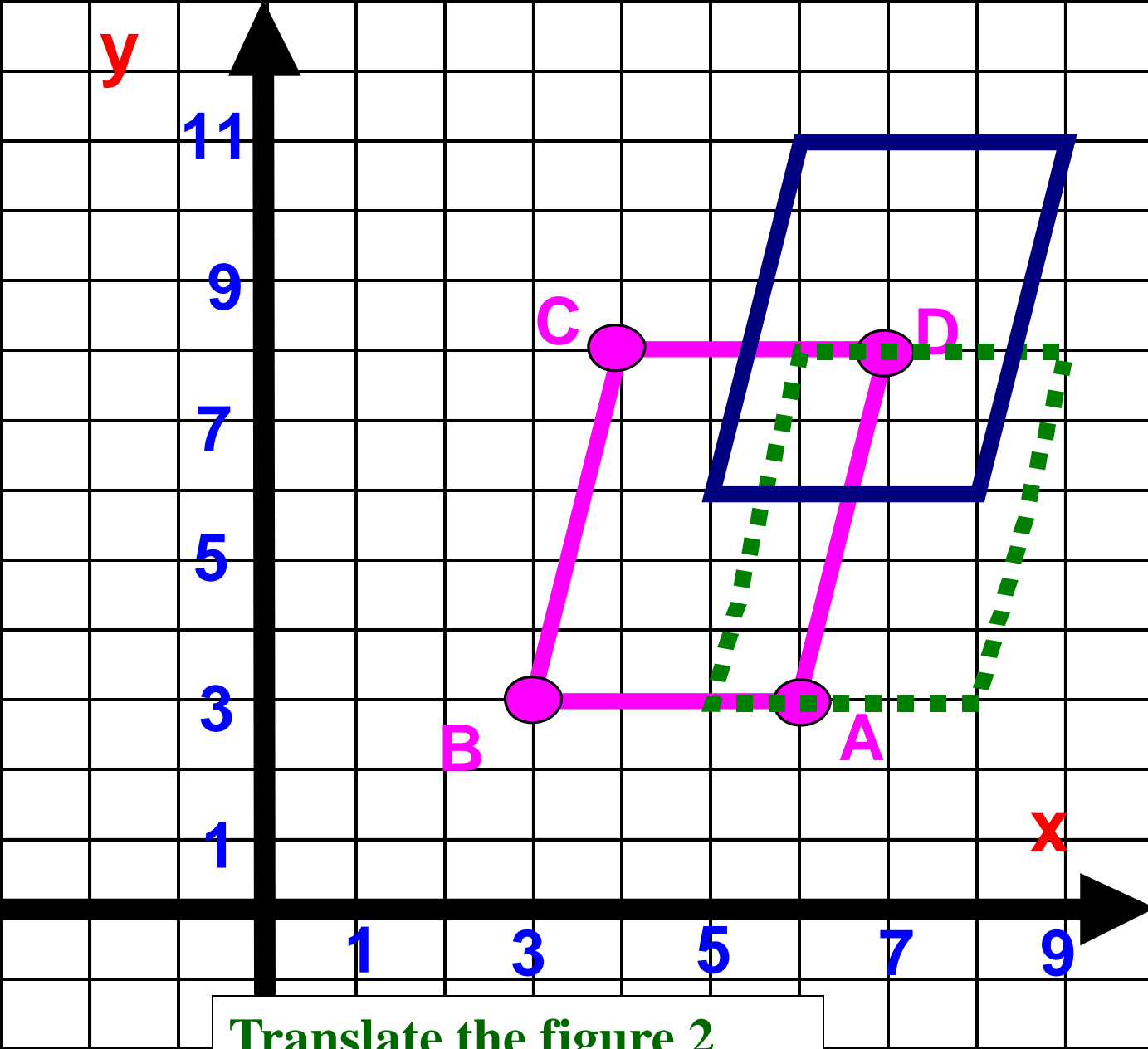
**A'(6+2,3+3)**

**B'(3+2,3+3)**

**C'(4+2,8+3)**

**D'(7+2,8+3)**

**Translate the figure 2  
spaces to the right and 3  
spaces up.**



**Translate 2  
spaces to the  
right.**

**Translate up  
3 spaces.**

**Original**

**A(6,3)**

**B(3,3)**

**C(4,8)**

**D(7,8)**

**Image**

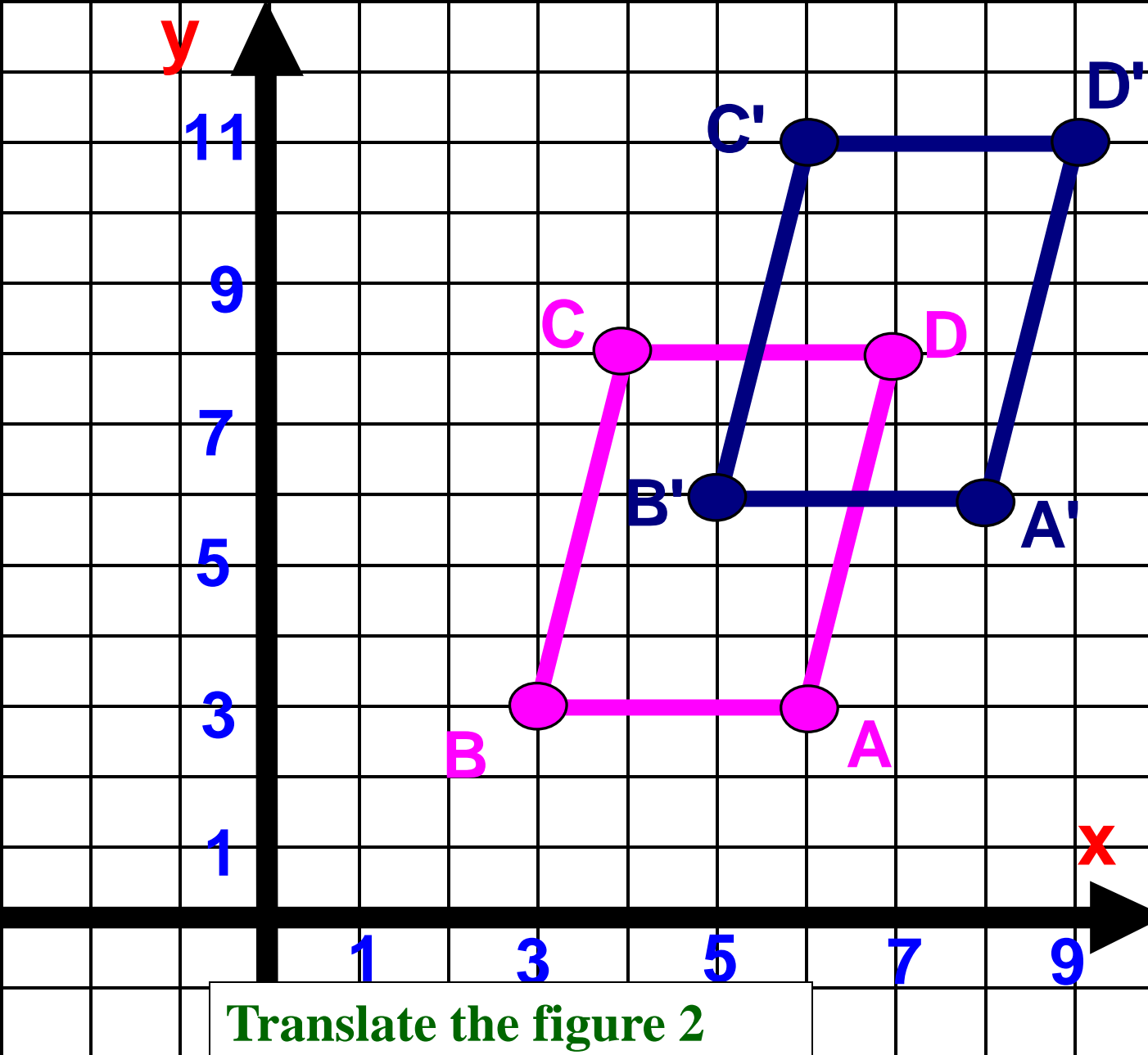
**A'(6+2,3+3)**

**B'(3+2,3+3)**

**C'(4+2,8+3)**

**D'(7+2,8+3)**

**Translate the figure 2  
spaces to the right and 3  
spaces up.**



Translate 2 spaces to the right.

Translate up 3 spaces.

Original  
 A(6,3)  
 B(3,3)  
 C(4,8)  
 D(7,8)

A'(8,6)  
 B'(5,6)  
 C'(6,11)  
 D'(9,11)

Translate the figure 2 spaces to the right and 3 spaces up.

# Translations

- Translating Left or Right involves the  $x$  values.
  - To find new  $x$  value:
    - Right-add
    - Left-subtract
- Translate the image in the graph



# Translations

- Translating Up or Down involves the  $y$  values.

- To find new  $y$  value:

Up-add

Down-subtract

Translate the image in the graph