

# Grade 5 Mathematics

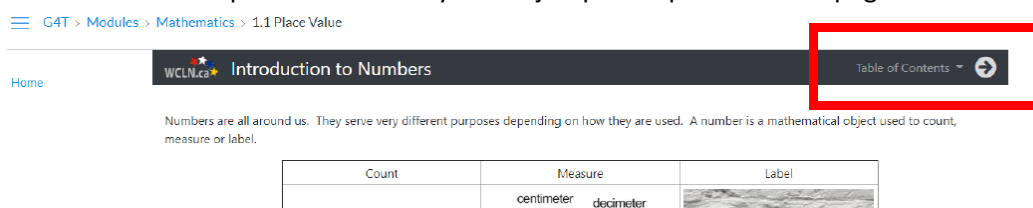
Week of February 8 – February 12

## Lesson 5.4: Transformations

### Lesson Materials

- Lessons for Section [5.4 Transformations](#)
- Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the “Table of Contents” at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.



Work through the online lessons for this section. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

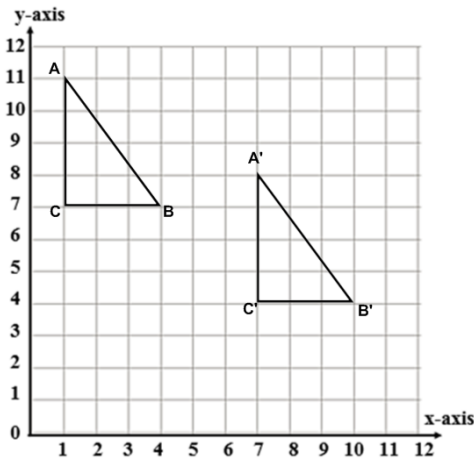
### Suggested Lesson Schedule

<p><b>Monday</b></p> <ul style="list-style-type: none"><li>• Translations</li><li>• Translating a Point</li><li>• Translating a Shape</li><li>• Your Turn</li><li>• Check Your Understanding</li></ul> <p><b>Tuesday</b></p> <ul style="list-style-type: none"><li>• LG p. 7-11, #1-3</li></ul> <p><b>Wednesday</b></p> <ul style="list-style-type: none"><li>• Rotation</li><li>• More Information</li><li>• Rotating Shapes</li><li>• Check Your Understanding</li></ul>	<p><b>Thursday</b></p> <ul style="list-style-type: none"><li>• LG p. 12, #4-5</li></ul> <p><b>Friday</b></p> <ul style="list-style-type: none"><li>• Reflection</li><li>• Check Your Understanding</li><li>• Review</li><li>• Summary</li><li>• LG p. 13-14, #6-8</li></ul>
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5.4 TRANSFORMATIONS

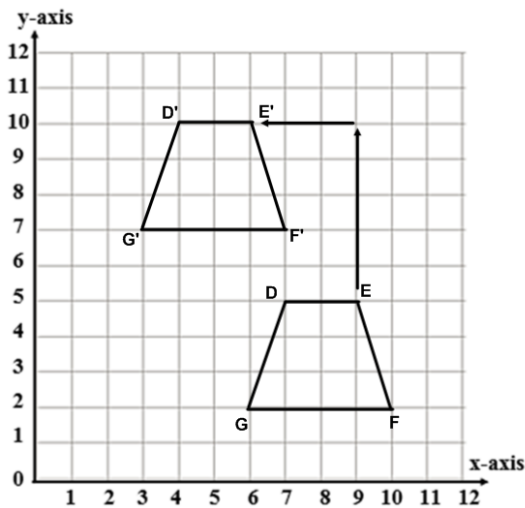
- Describe the translation (slide) of each figure below. Remember to use left, right, up, and down and the number of squares moved to describe the figure's movement. The first example has been completed for you.

Example:

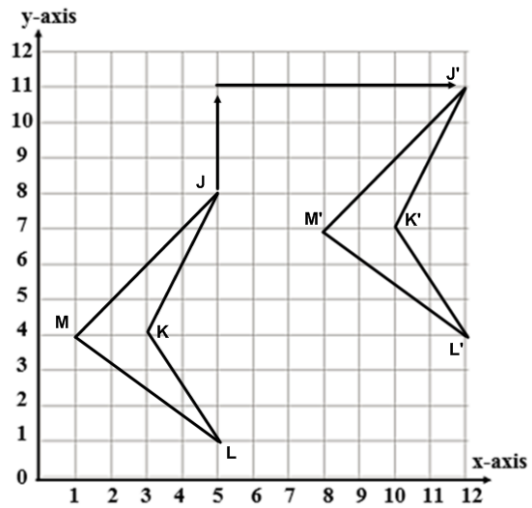


ABC was moved 6 right and 3 down

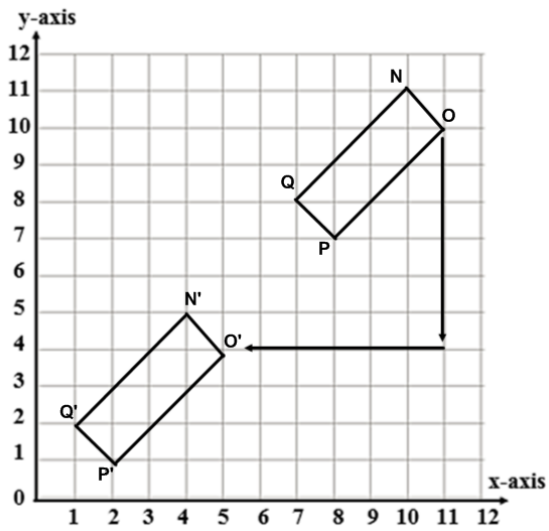
a.



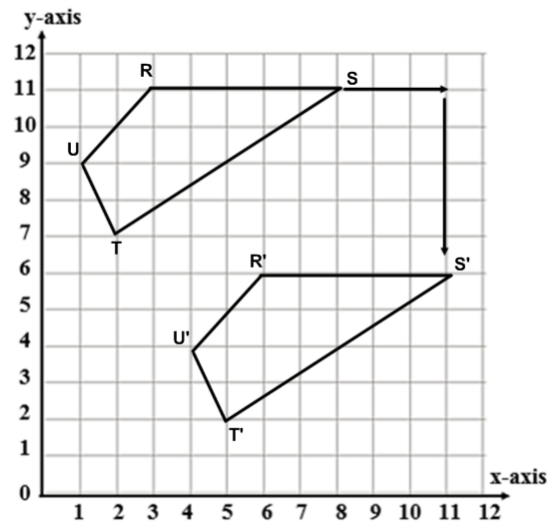
b.



c.

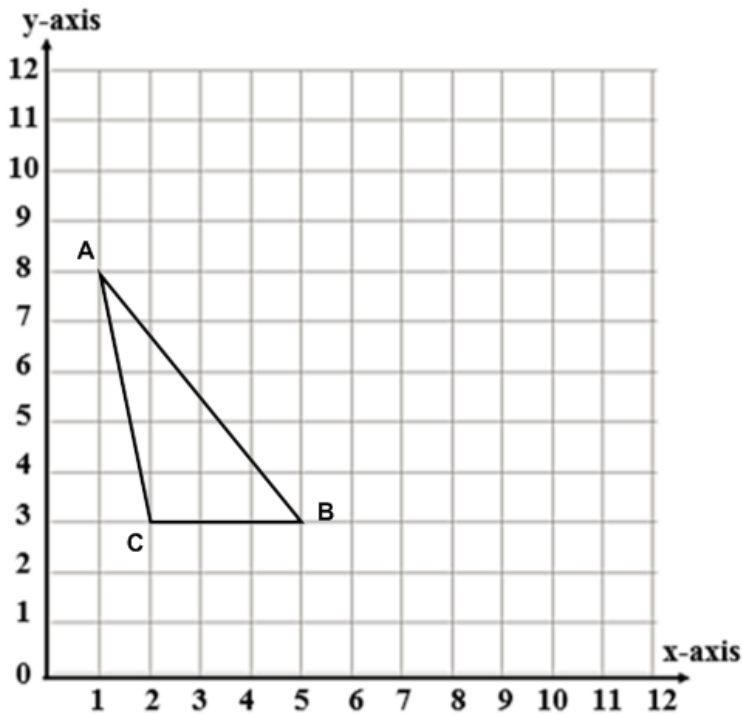


d.



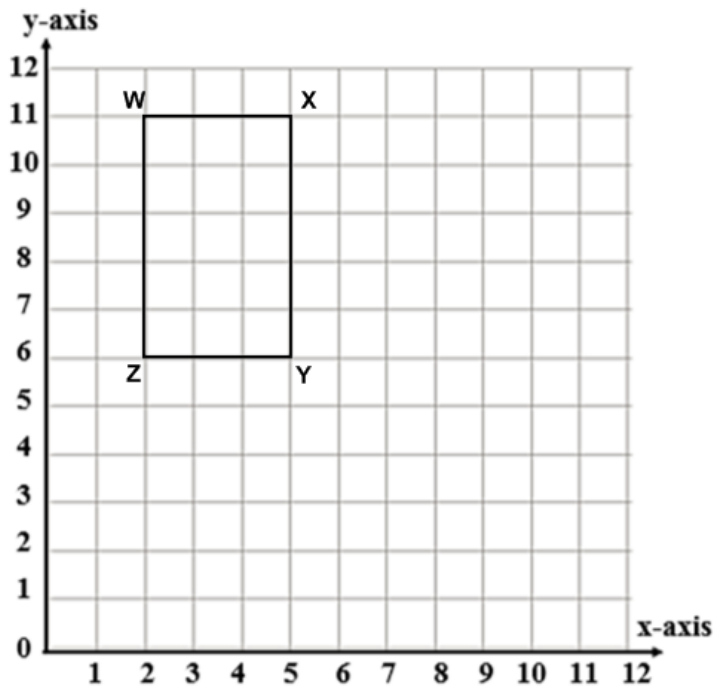
2. Translate the figure 6 units to the right and 3 units up. Note the vertices for the Image.

a.



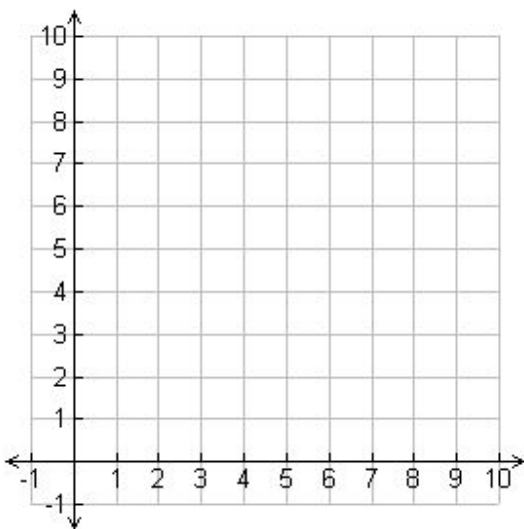
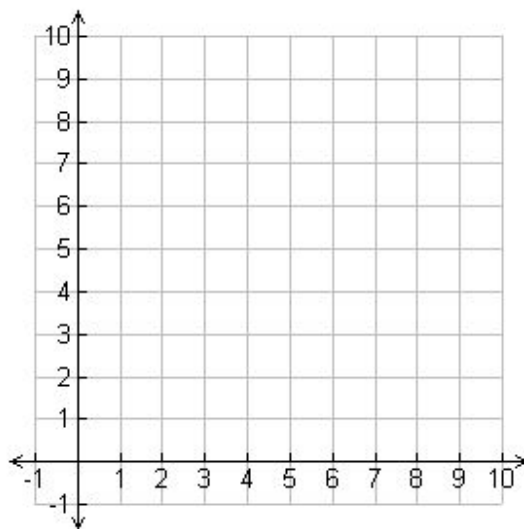
Vertices for Figure ABC	Vertices for Image A'B'C'
A (1, 8)	A' ( ____, ____)
B (5, 3)	B' ( ____, ____)
C (2, 3)	C' ( ____, ____)

3. Translate this figure 3 units to the right and 2 units down. Note the vertices for the Image.

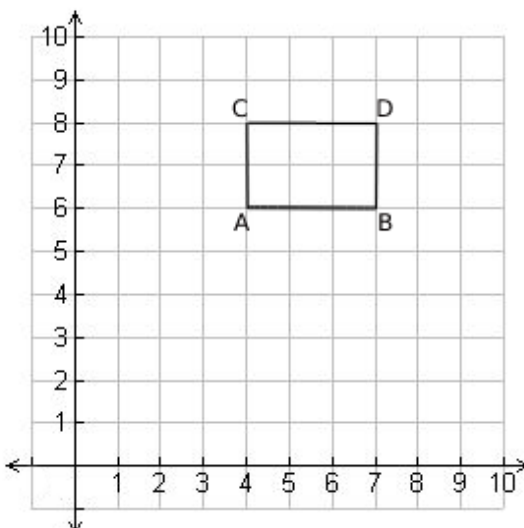
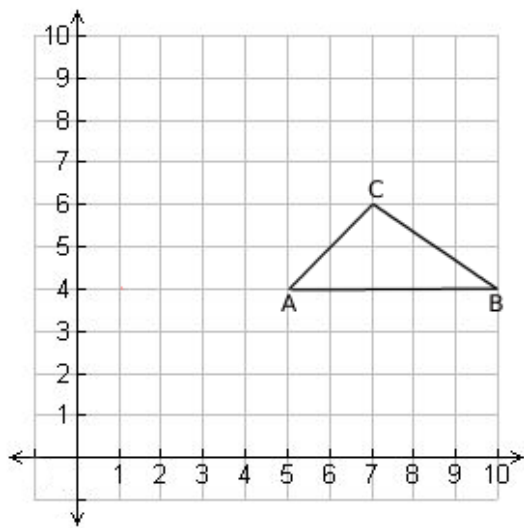


Vertices for Figure WXYZ	Vertices for Image W'X'Y'Z'
W (2, 11)	W' (____, ____)
X (5, 11)	X' (____, ____)
Y (5, 6)	Y' (____, ____)
Z (2, 6)	Z' (____, ____)

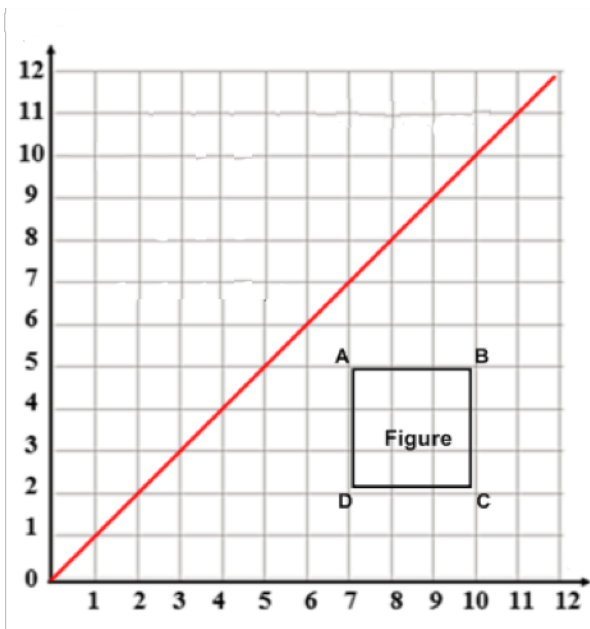
4. Perform the following rotation on the given point.

<p>a. <math>(4,2)</math> <math>90^\circ</math> counterclockwise around <math>(5,5)</math></p> 	<p>b. <math>(5,8)</math> <math>180^\circ</math> clockwise around <math>(4,5)</math></p> 
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5. Rotate the given shapes as indicated.

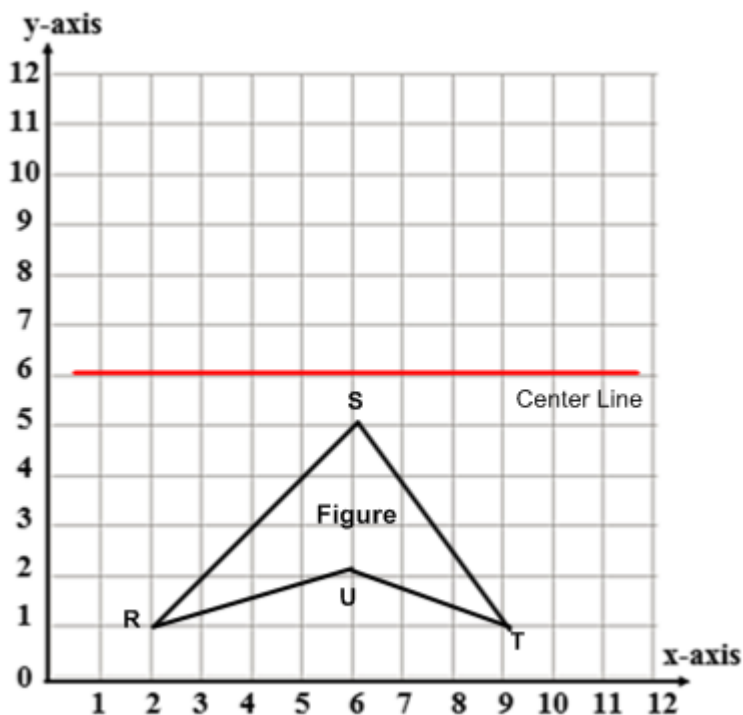
<p>a. <math>90^\circ</math> clockwise around A</p> 	<p>b. <math>180^\circ</math> counter clockwise around A</p> 
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6. Reflect the figure in each example across the given line. Record the vertices in the table.



Vertices for Figure ABCD	Vertices for Image A'B'C'D'
A (7, 5)	A' (__, __)
B (10, 5)	B' (__, __)
C (10, 2)	C' (__, __)
D (7, 2)	D' (__, __)

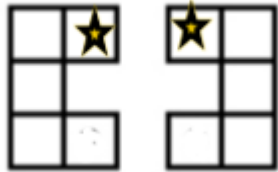
7. Reflect the figure in each example across the given line. Record the vertices in the table.



Vertices for Figure RSTU	Vertices for Image R'S'T'U'
R (__, __)	R' (__, __)
S (__, __)	S' (__, __)
T (__, __)	T' (__, __)
U (__, __)	U' (__, __)

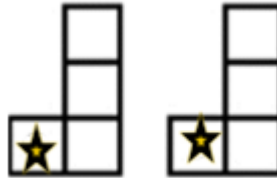
8. Write the correct transformation on the line; translation, reflection, or rotation.

a.



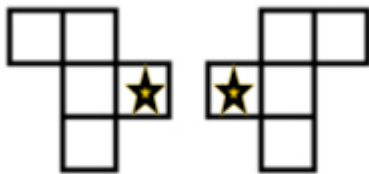
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b.



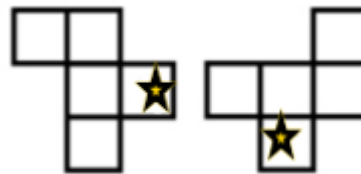
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c.



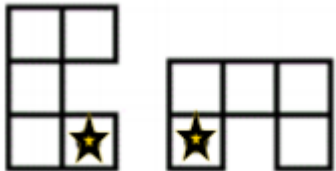
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d.



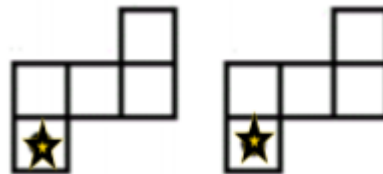
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e.



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f.



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