



## Lesson 2 Assignment

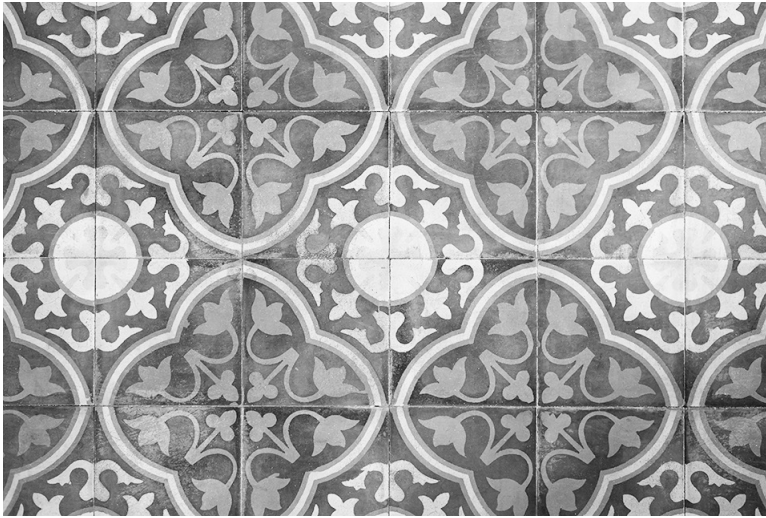
### Translations

Work slowly and carefully. If you are having difficulty, go back and review the appropriate *Lesson*.

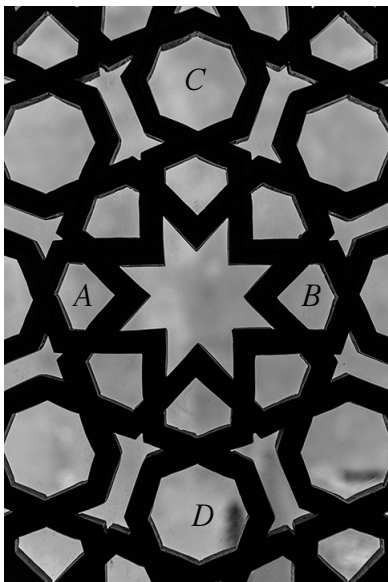
For full marks, show all calculations, steps, and/or explain your answers.

Total: 15 marks.

1. Identify one translation in the diagram below by drawing a box around an image and a box around its translated image.

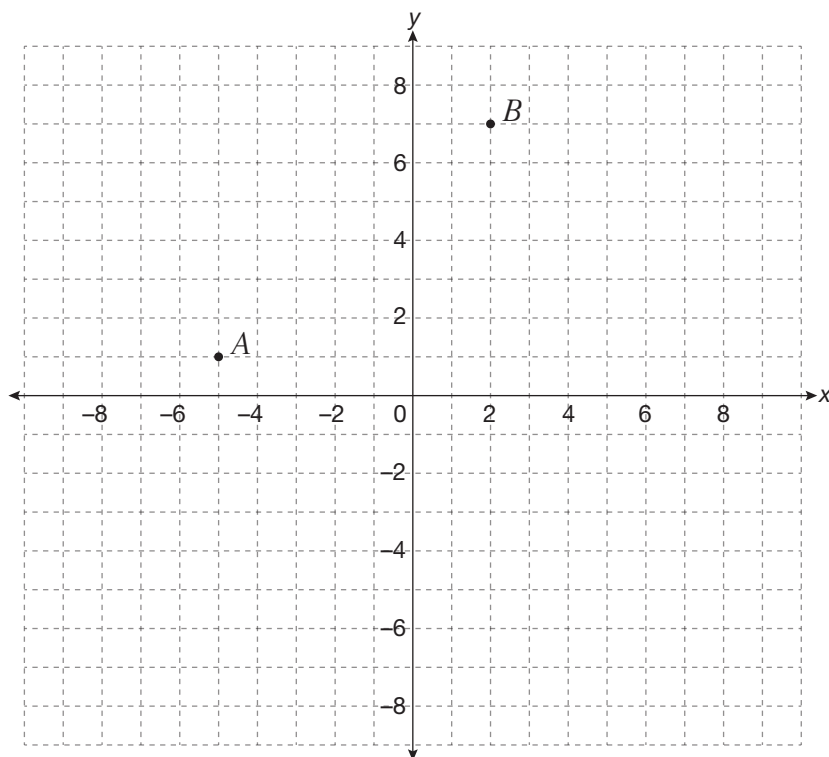


2. Use the diagram below to answer the following questions.

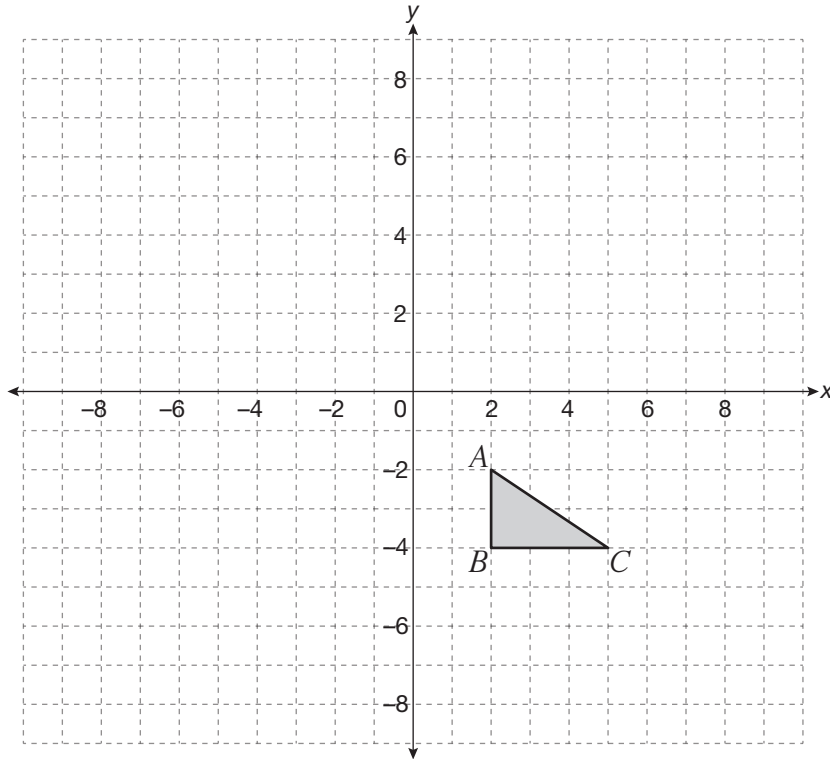


- 1 a. Is it possible to move from shape *A* to shape *B* by using a translation?
- 1 b. Is it possible to move from shape *C* to shape *D* by using a translation?

- 1 3. Describe the translation from point  $A(-5, 1)$  to point  $B(2, -7)$ .  
**Hint:** State the horizontal and vertical movement of the point.



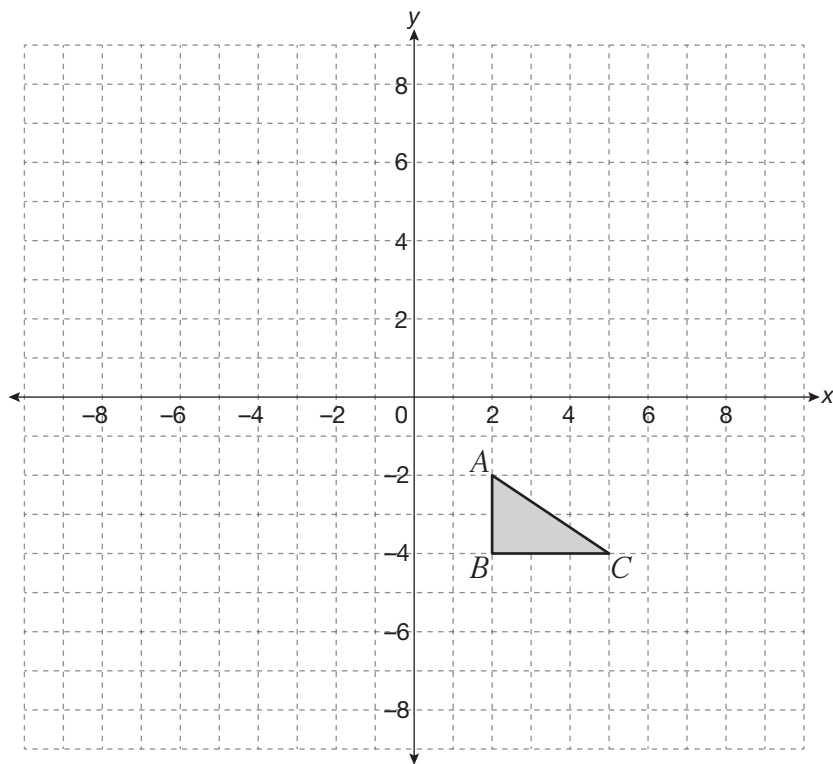
4. Use the graph below to answer the following questions.



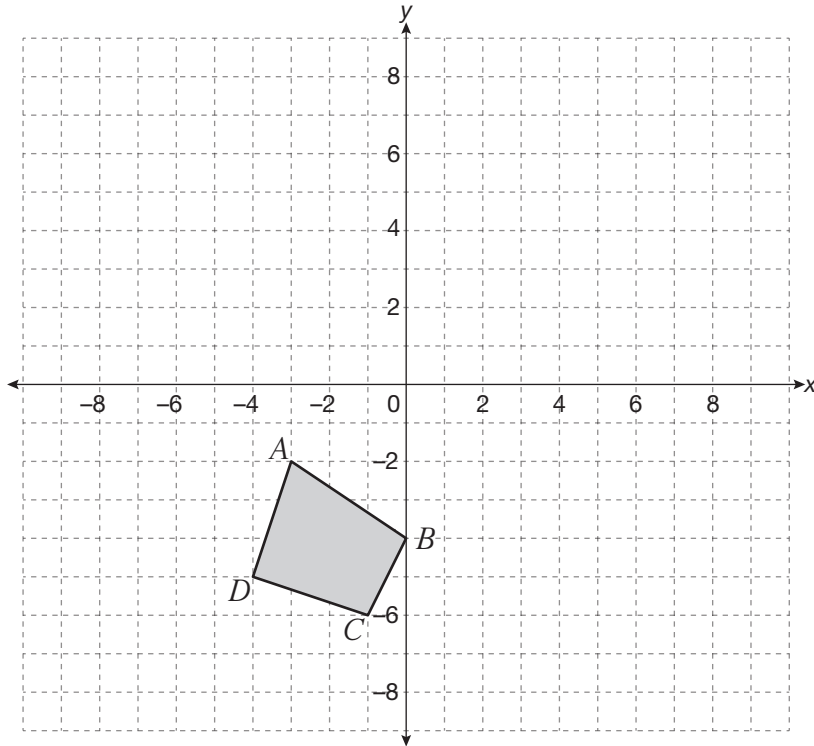
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- a. State the coordinates of each vertex in the triangle.

- 2 b. Translate the triangle horizontally 6 units to the left and vertically 3 units up. Label each new vertex using the correct notation.

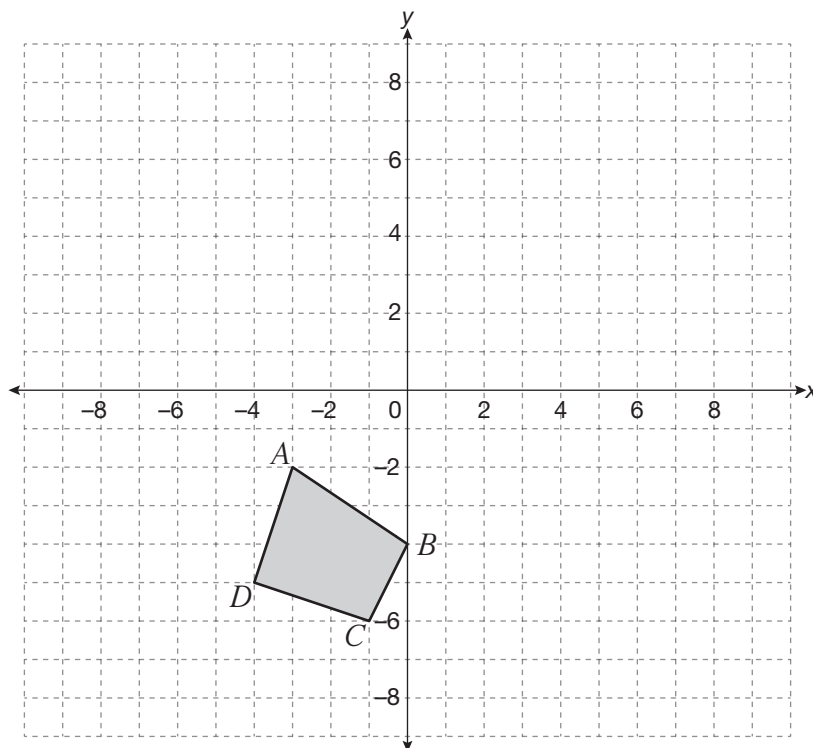


5. Use the graph below to answer the following questions.

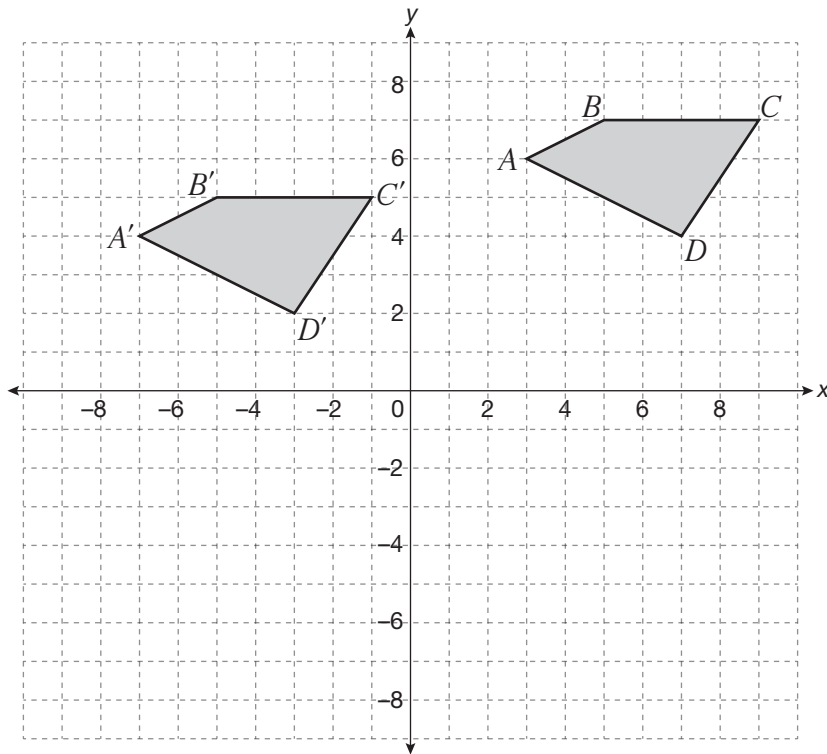


- 1 a. State the coordinates of each vertex in the quadrilateral.

- 2 b. Translate the polygon horizontally 7 units to the right and vertically 1 unit up. Label each new vertex using the correct notation.

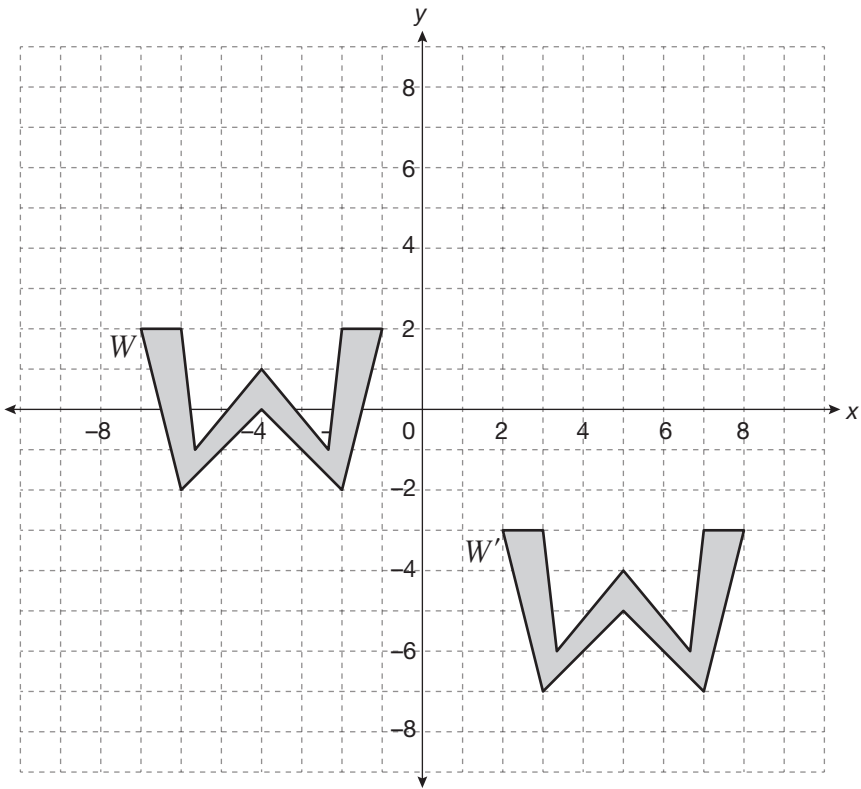


- 1 6. State the number of units the polygon has been translated horizontally and vertically and give the direction of each.



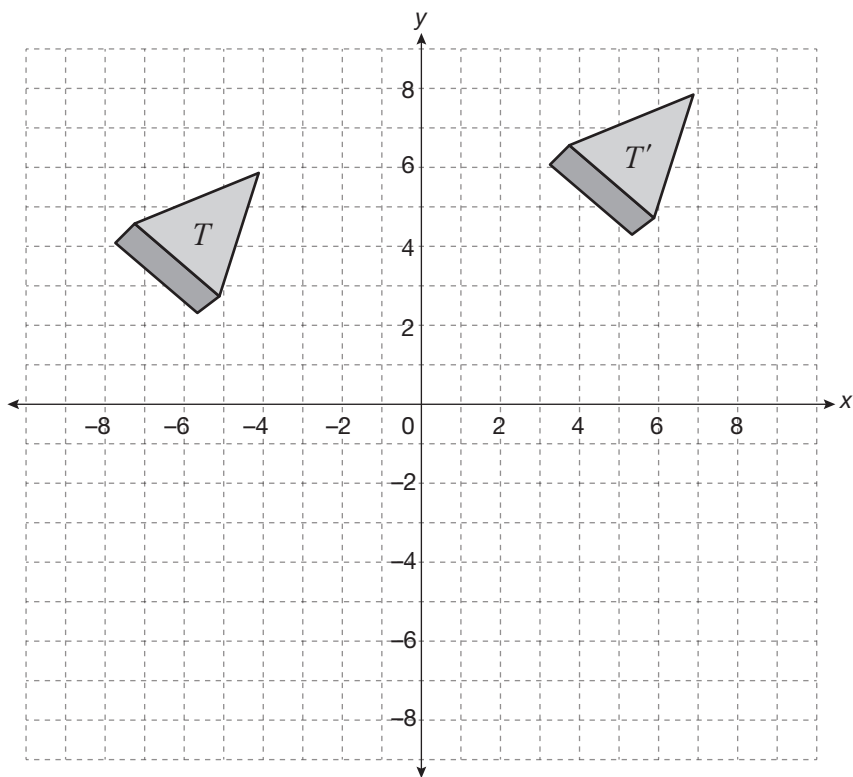


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7. State the number of units the shape has been translated horizontally and vertically and give the direction of each.

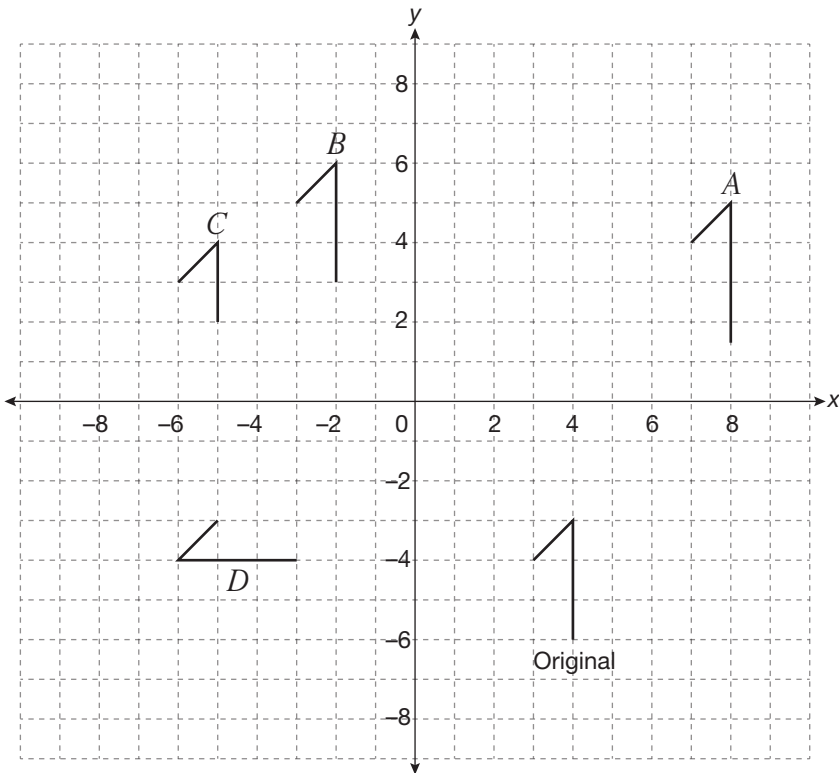


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8. State the number of units the shape has been translated horizontally and vertically and give the direction of each.



- 1 9. Which image is a translation of the original shape?



10. Which image is a translation of the original pentagon?

