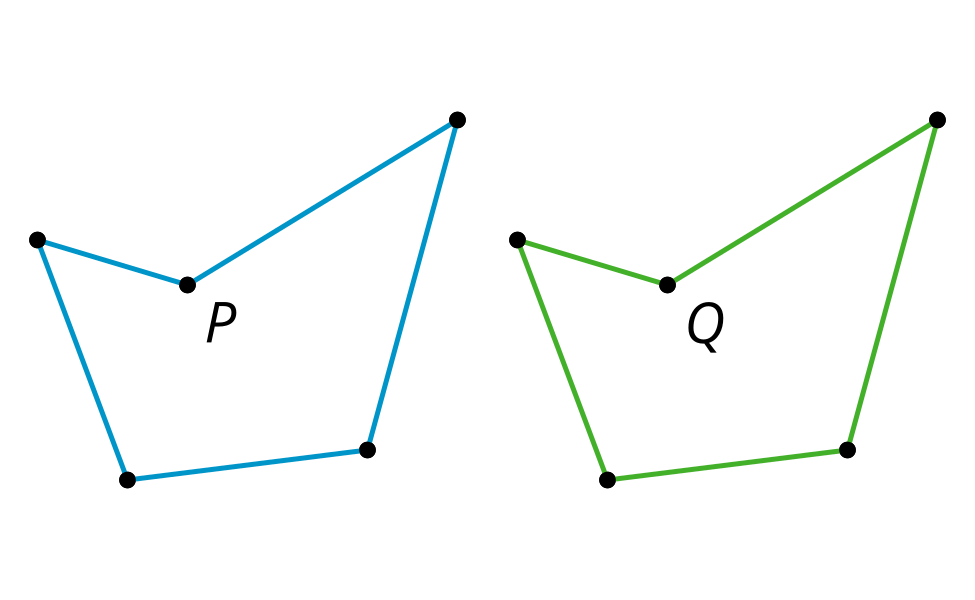
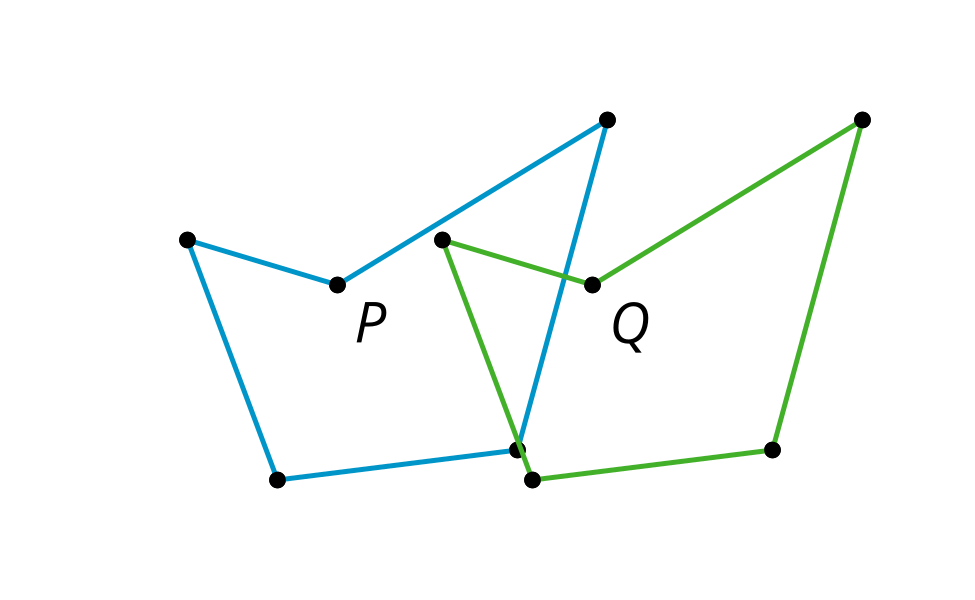
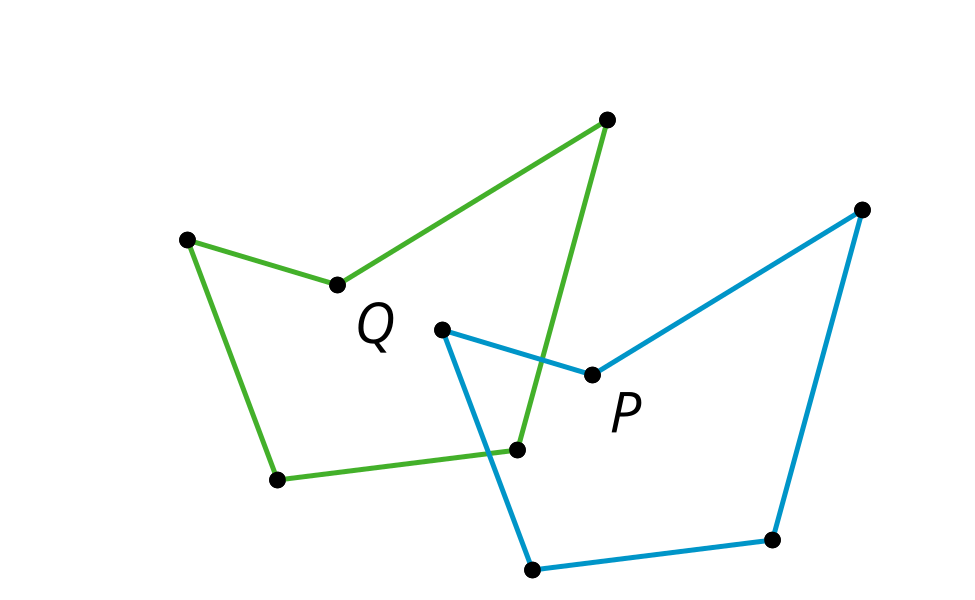
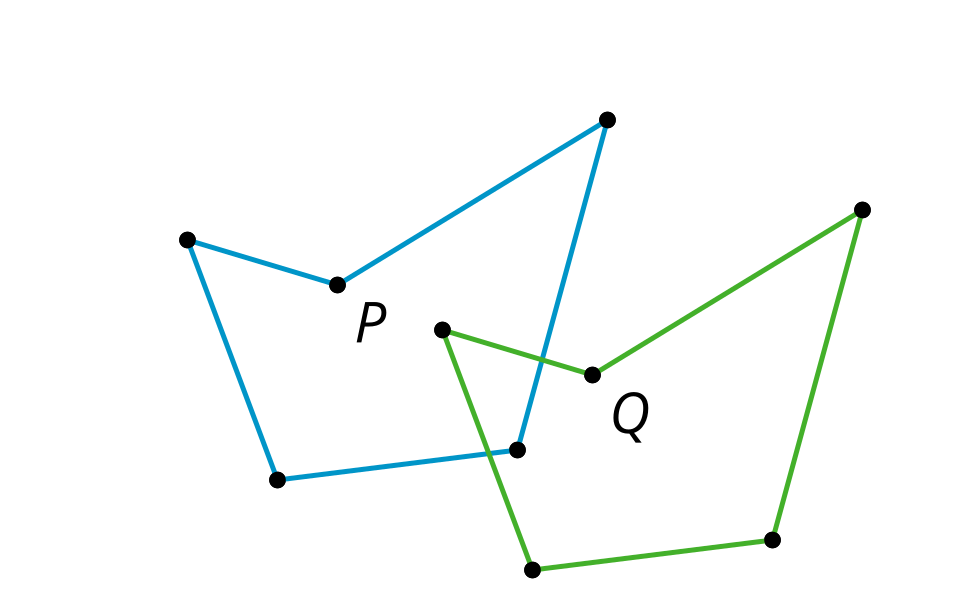
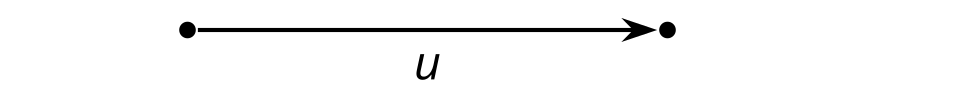
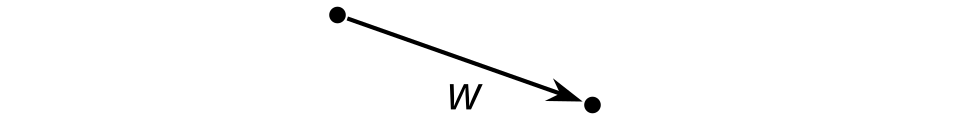
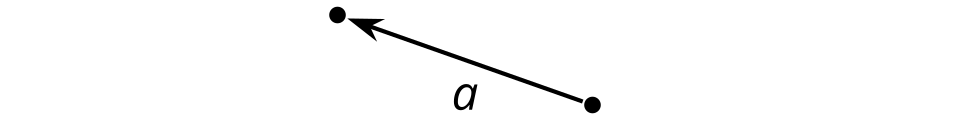
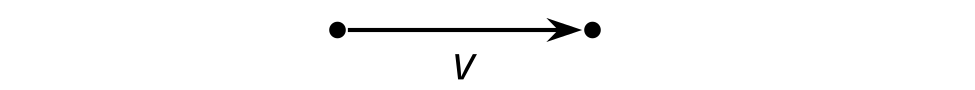
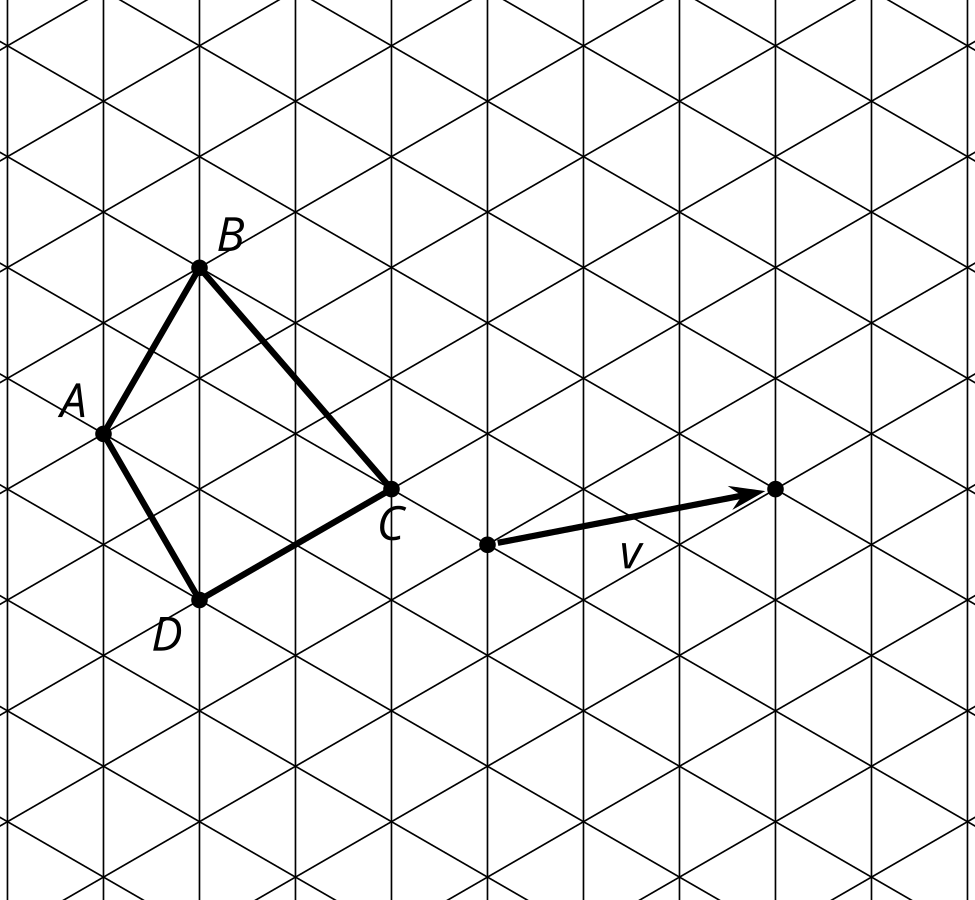
### Lesson 12 Practice Problems

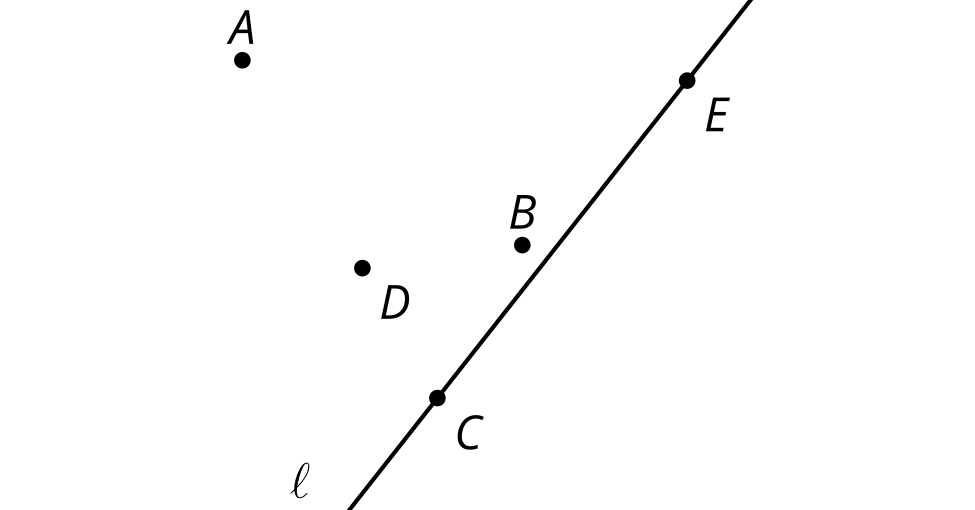
1. Match the directed line segment with the image of Polygon being transformed to Polygon by translation by that directed line segment.

* Translation 1
* 
* Translation 2
* 
* Translation 3
* 
* Translation 4
* 
  1. 
  2. 
  3. 
  4. 
  5. Translation 1
  6. Translation 2
  7. Translation 3
  8. Translation 4

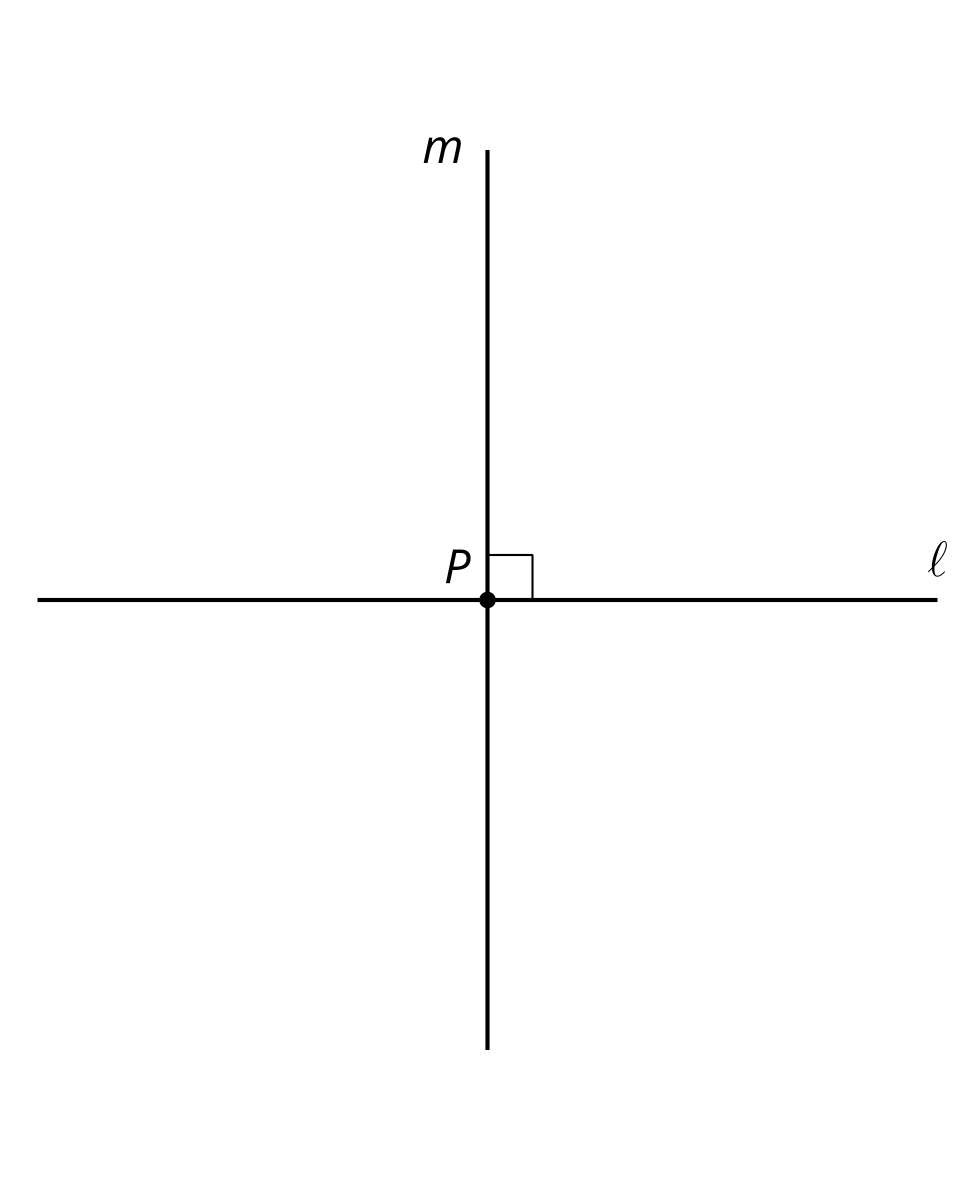
1. Draw the image of quadrilateral when translated by the directed line segment . Label the image of as , the image of as , the image of as and the image of as .

* 

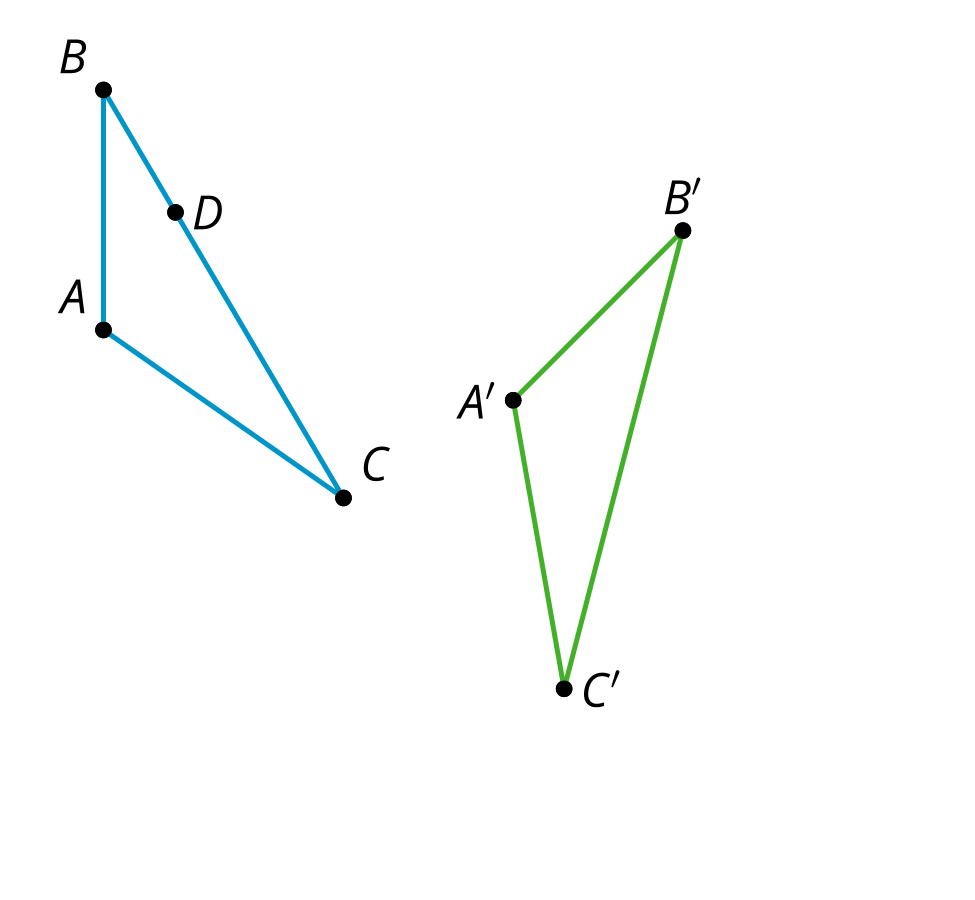
1. Which statement is true about a translation?
   1. A translation takes a line to a parallel line or itself.
   2. A translation takes a line to a perpendicular line.
   3. A translation requires a center of translation.
   4. A translation requires a line of translation.
2. Select **all** the points that stay in the same location after being reflected across line .

* 
  1. A
  2. B
  3. C
  4. D
  5. E
* (From Unit 1, Lesson 11.)

1. Lines and are perpendicular. A point has this property: rotating  180 degrees using center has the same effect as reflecting  over line .

* 
  1. Give two possible locations of .
  2. Do all points in the plane have this property?
* (From Unit 1, Lesson 11.)

1. There is a sequence of rigid transformations that takes to , to , and to . The same sequence takes to . Draw and label :

* 
* (From Unit 1, Lesson 10.)

1. Two distinct lines,  and , are each perpendicular to the same line .
   1. What is the measure of the angle where line meets line ?
   2. What is the measure of the angle where line meets line ?

* (From Unit 1, Lesson 6.)



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