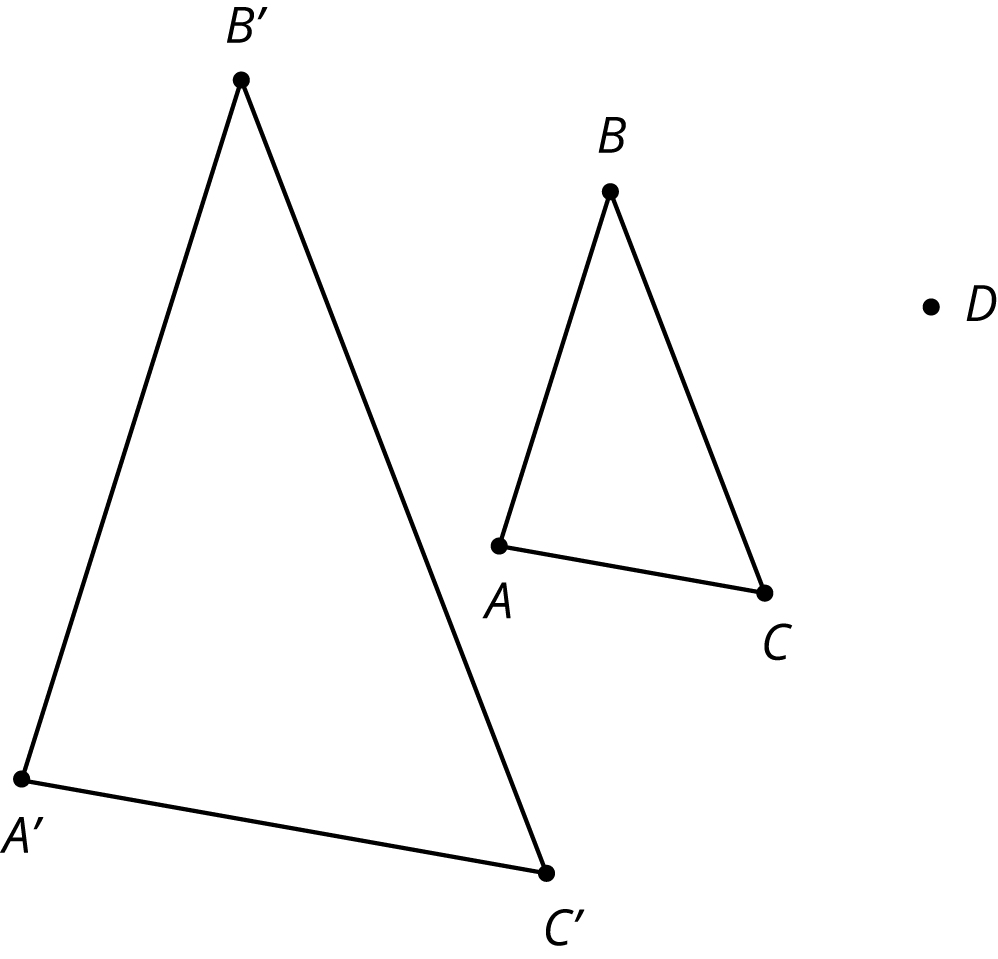
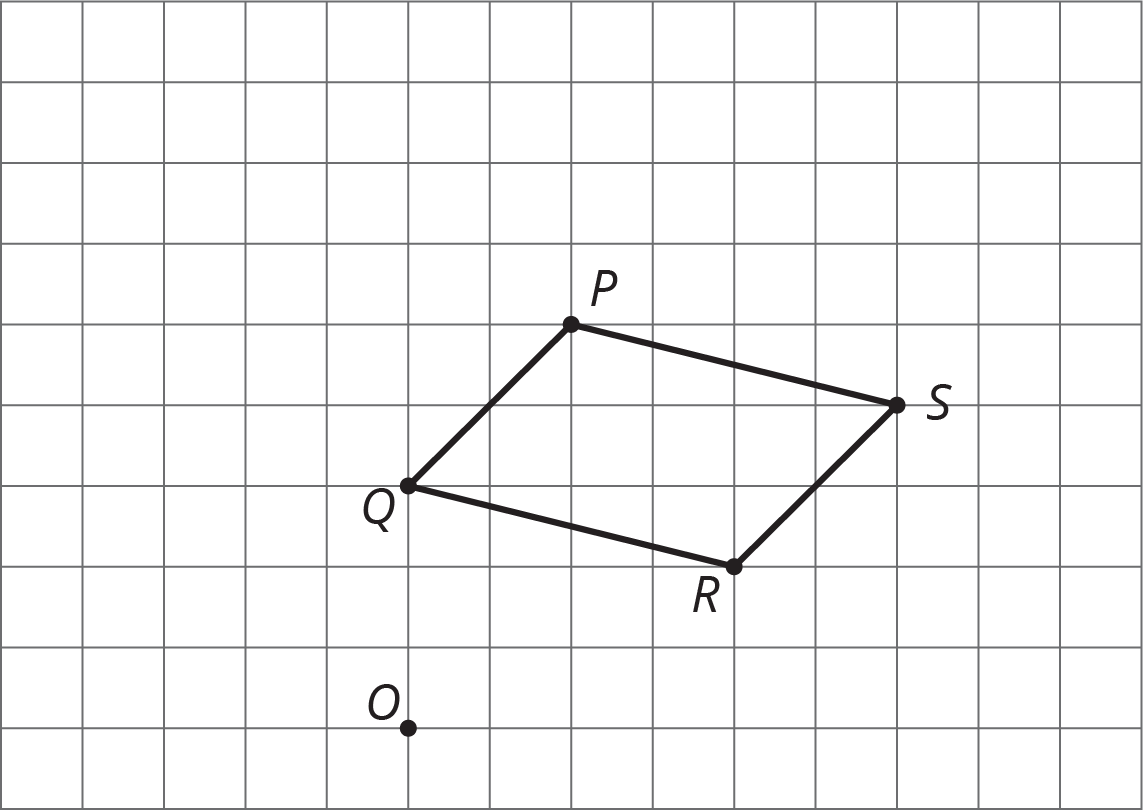
### Lesson 10 Practice Problems

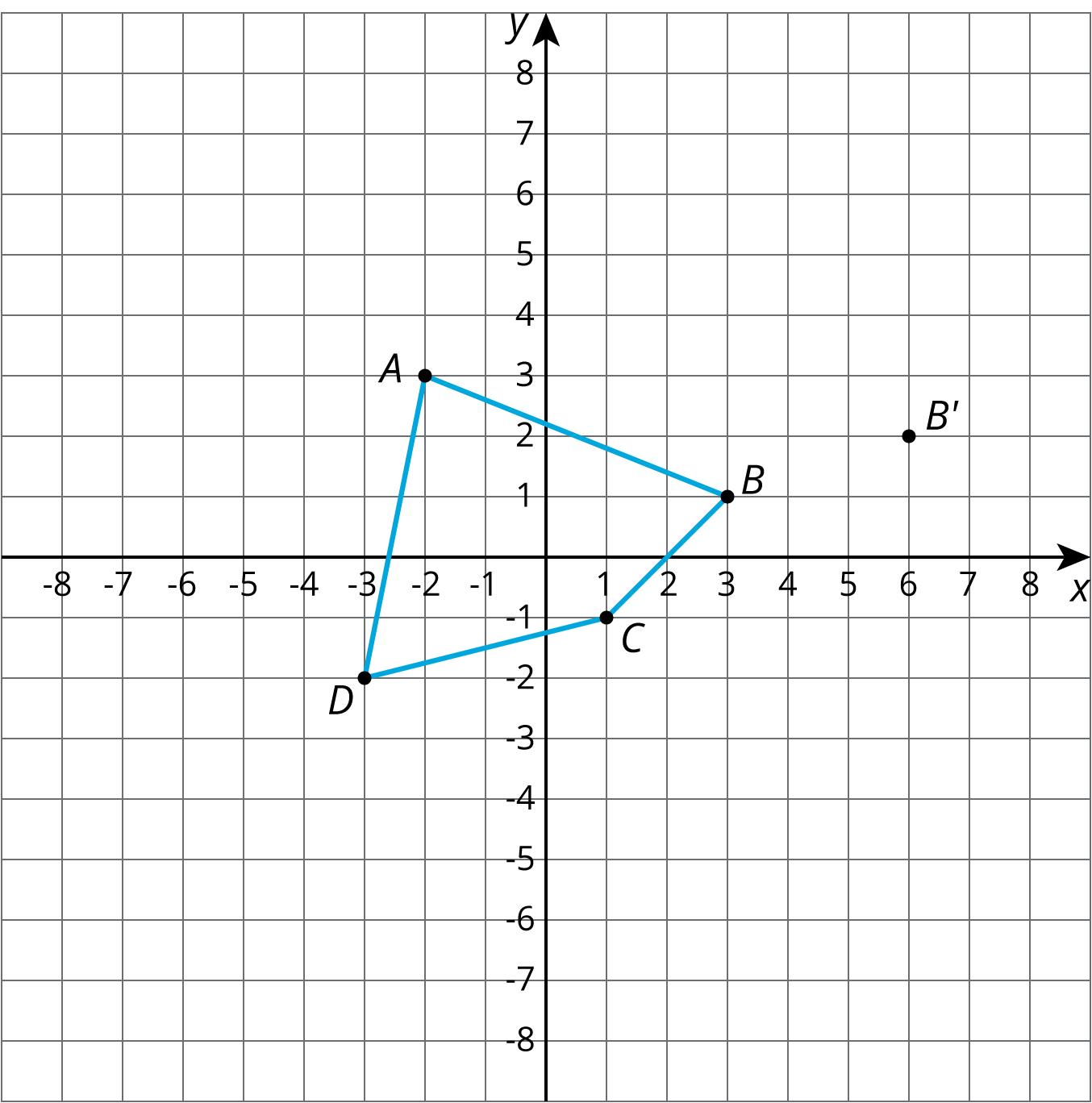
1. Triangle is dilated using as the center of dilation with scale factor 2.

* The image is triangle . Clare says the two triangles are congruent, because their angle measures are the same. Do you agree? Explain how you know.
* 

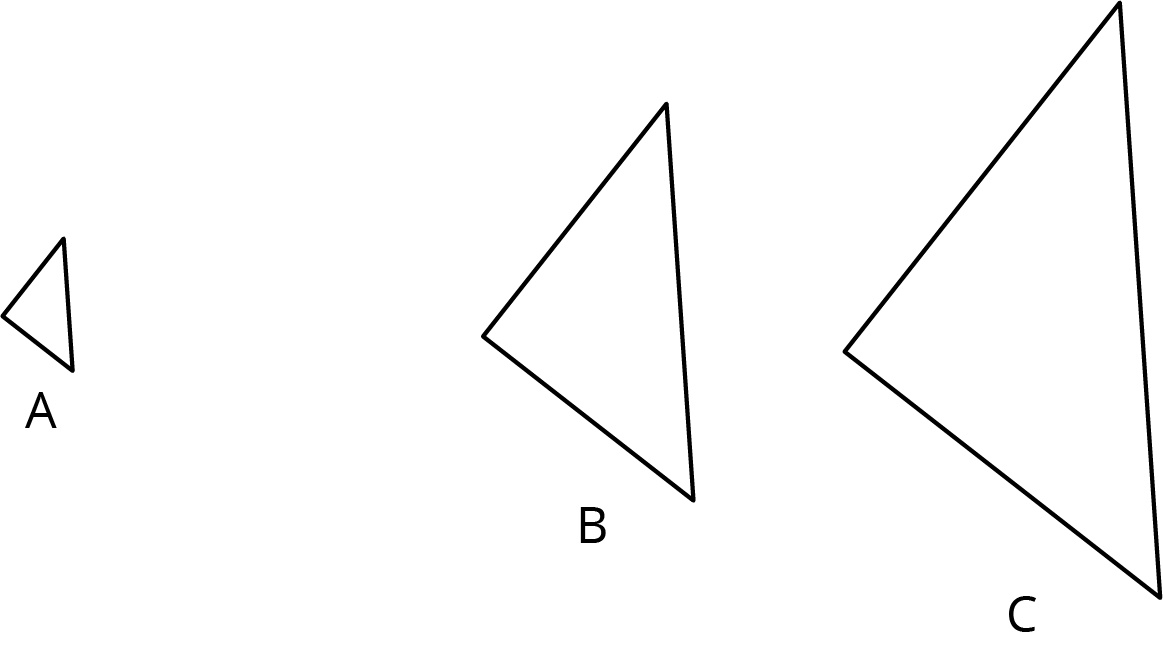
1. On graph paper, sketch the image of quadrilateral PQRS under the following dilations:
   1. The dilation centered at with scale factor 2.
   2. The dilation centered at with scale factor .
   3. The dilation centered at with scale factor .

* 

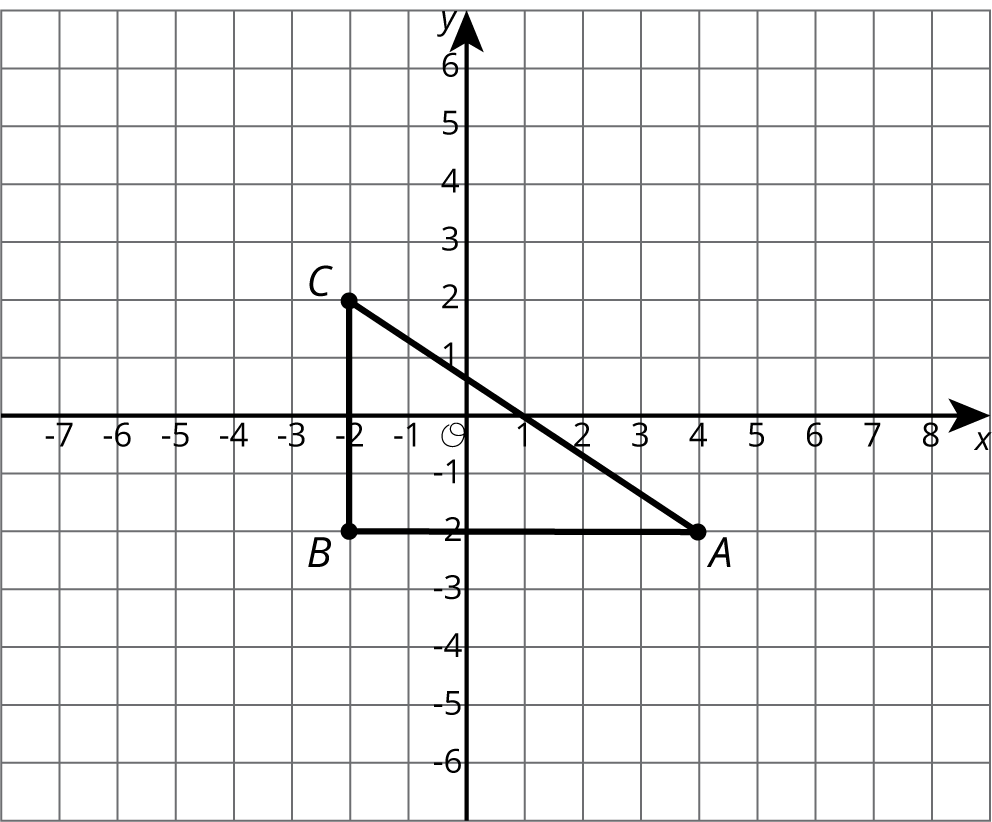
1. Quadrilateral is dilated with center , taking  to . Draw .

* 

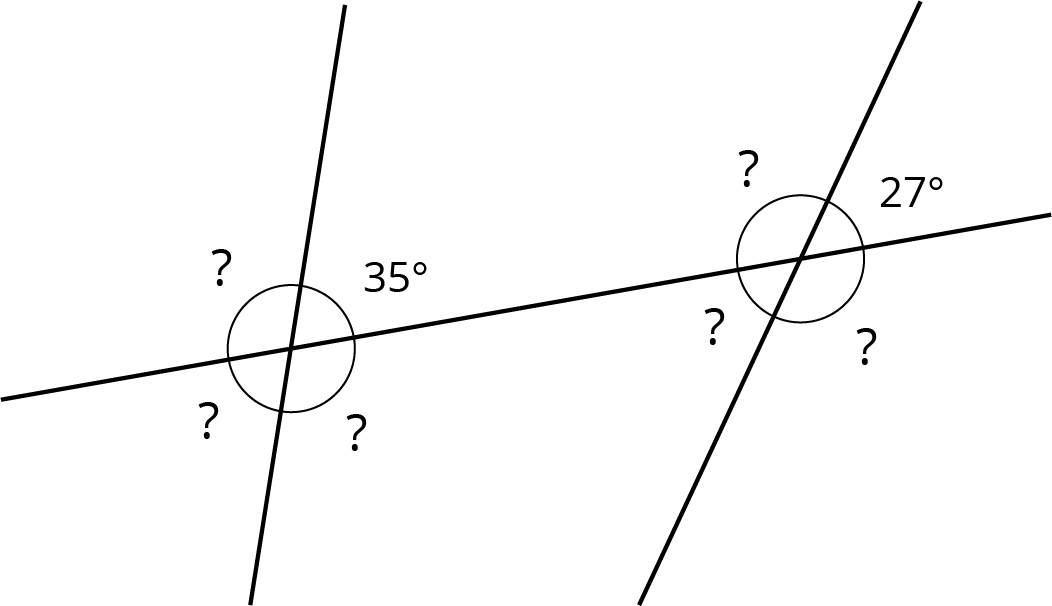
1. Triangles and have been built by dilating Triangle .

* 
  1. Find the center of dilation.
  2. Triangle is a dilation of with approximately what scale factor?
  3. Triangle is a dilation of with approximately what scale factor?
  4. Triangle is a dilation of with approximately what scale factor?

1. Here is a triangle.
   1. Draw the dilation of triangle , with center , and scale factor 2. Label this triangle .
   2. Draw the dilation of triangle , with center , and scale factor . Label this triangle .
   3. Is a dilation of triangle ? If yes, what are the center of dilation and the scale factor?

* 

1. The diagram shows three lines with some marked angle measures.

* 
* Find the missing angle measures marked with question marks.
* (From Unit 1, Lesson 12.)



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