

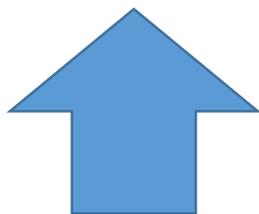
Grade 8 Module 3 Mid-Module Assessment A

Name _____

Date _____

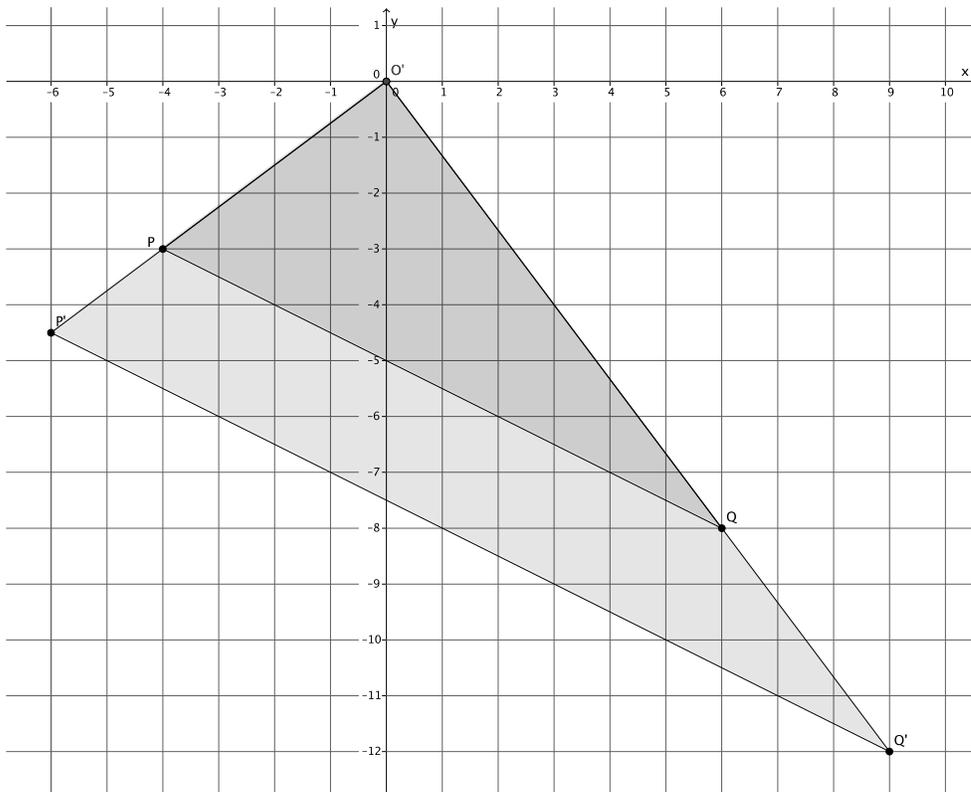
1. Use the figure below to complete parts (a) and (b).

Use a compass and ruler to produce an image of the figure with center O and scale factor $r = 2$

• O 

2. Use the diagram below to answer the questions that follow.

Let D be the dilation with center O and scale factor $r > 0$ so that $Dilation(P) = P'$ and $Dilation(Q) = Q'$.

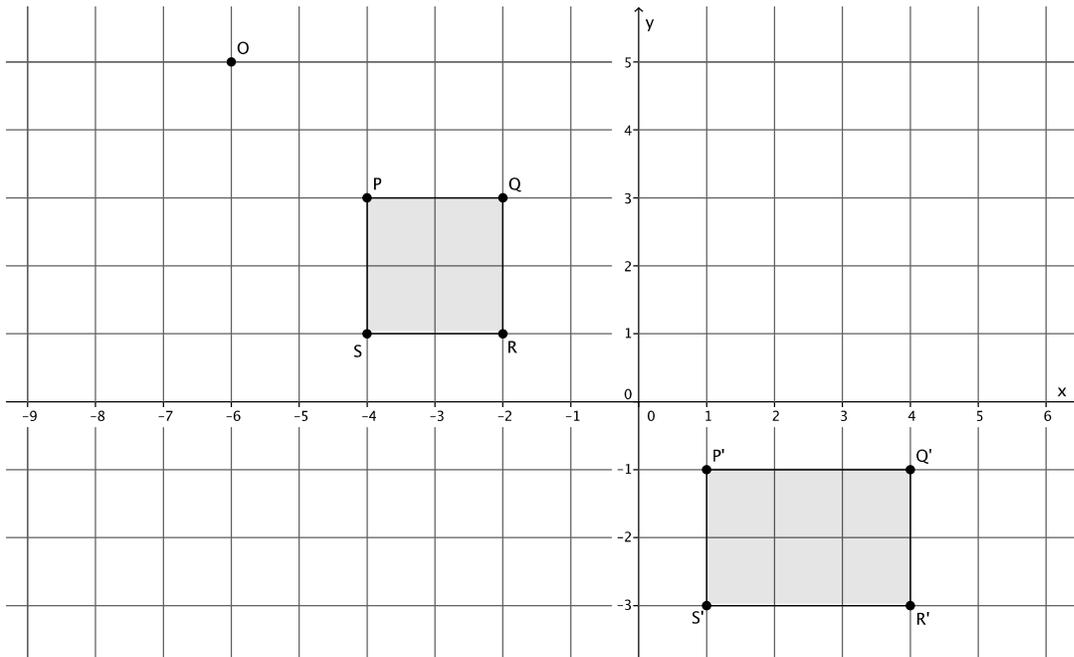


a. Use lengths $|OQ| = 10$ units and $|OQ'| = 15$ units to determine the scale factor r of dilation D . Describe how to determine the coordinates of P' using the coordinates of P .

b. If $|OQ| = 10$ units, $|OQ'| = 15$ units, and $|P'Q'| = 12.4$ units, determine the length of $|PQ|$. Round your answer to the tenths place, if necessary.

3. Use a ruler and compass, as needed, to answer the question.

Is there a dilation D with center O that would map figure $PQRS$ to figure $P'Q'R'S'$? If yes, describe the dilation in terms of coordinates of corresponding points.



4. Triangle ABC is located at points $A = (-2, 4)$, $B = (3, -3)$, and $C = (2, -1)$ and has been dilated from the origin by a scale factor of 2. Draw and label the vertices of triangle ABC . Determine the coordinates of the dilated triangle $A'B'C'$, and draw and label it on the coordinate plane.

