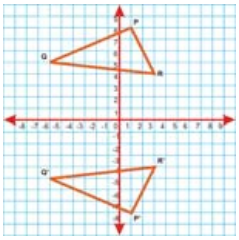
Name _____ Date _____

Quiz: Dilations and Similarity

1 Under a dilation, triangle P(0,0), Q(3,5), R(1,2) becomes triangle P'(0,0), Q'(6,10), R'(2,4). What is the scale factor for this dilation?

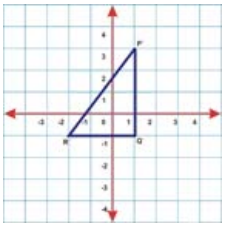
2 Rectangle P(1,2), Q(2,2), R(2,0), S(1,0) is similar to rectangle P'Q'R'S'. If R'Q' = 3, graph a dilation (center origin) of rectangle ABCD showing both rectangles and state the scale factor.

3 The graph below shows an example of a transformation. Which transformation is shown?

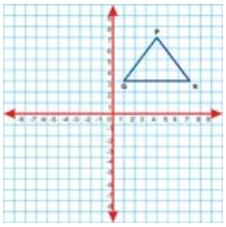


(a)dilation,
(b)translation or
(c)reflection in origin

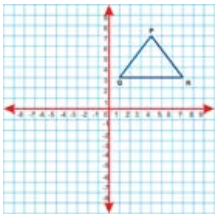
4 What are the coordinates of the image of point R' under a dilation with center at the origin of scale factor 2?



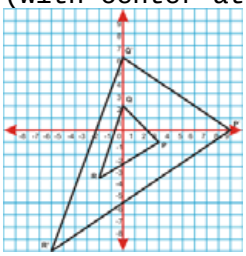
5 Under a dilation of scale factor 4 with the center at the origin, what will be the coordinates of the image of point Q?



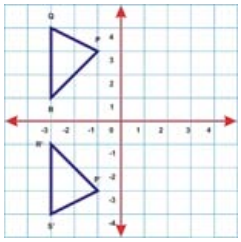
6 What are the coordinates of the image of point R under a dilation with center at the origin of scale factor 2?



7 What is the scale factor of the dilation (with center at the origin) shown below?

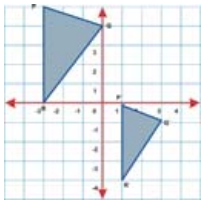


8 The graph at the left shows an example of a transformation. Which transformation is shown?



(a)dilation,
(b)translation or
(c)reflection in origin

9 Under a dilation of scale factor 3 with the center at the origin, what will be the coordinates of the image of point P'?



10 Under a dilation of scale factor 2 with the center at the origin, what will be the coordinates of the image of point Q?