

Dilations on the Plane

As a group:

Decide who will work with shape A and shape B.

Individually:

Identify and record the coordinates of the vertices of your initial shape (A or B) in the table below.

Dilate shape A or shape B using each of the scale factors listed here. Use the origin as your dilation point. Draw each new image and record the coordinates of its vertices in the table.

Note how the coordinates change from the initial shape to the dilated image.

- a) Scale factor of 2
- b) Scale factor of 0.5
- c) Scale factor of 0.25
- d) Scale factor of -3

Dilations on the Plane				
Coordinates of Original Vertices	Scale factor of 2	Scale factor of 0.5	Scale factor of 0.25	Scale factor of -3

Dilations on the Plane (cont'd)

As a group:

Share the results of your dilations with each other.

- What do you notice about how the coordinates change as you apply different scale factors? Do you notice any patterns?
- Can you create any general rules about dilations?

