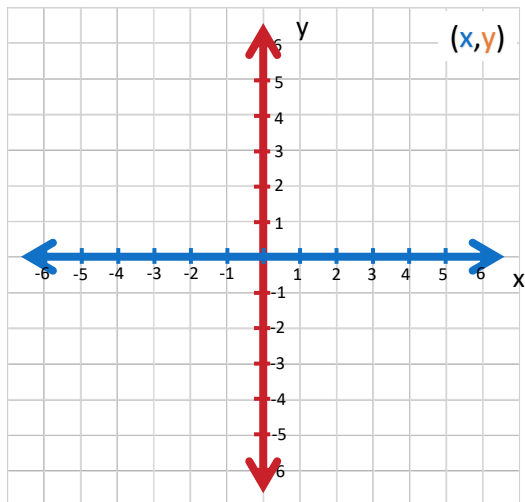
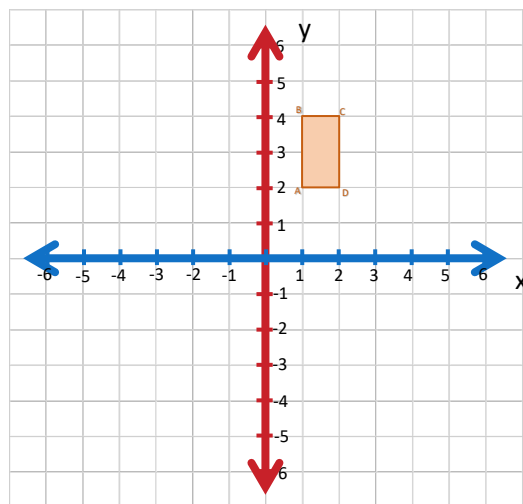


## Warmup

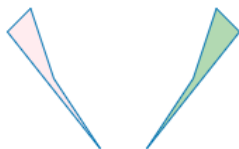
1. Use the points A:(-2,-5), B:(-3,-6), C:(-6,-6), D:(-5,-4) to graph a polygon, then identify it.



2. Plot the translation of the quadrilateral 4 to the right and 2 up.



3. What transformation is shown?



4. Identify each quadrilateral



(A) parallelogram

(B) trapezoid

(C) square

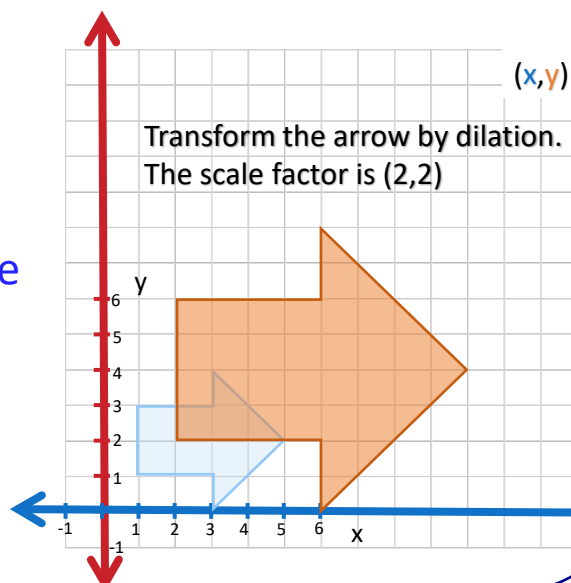
(D) Rhombus

(E) rectangle

## I. Dilations

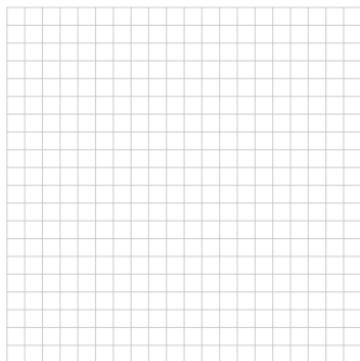
**Dilation:** The enlarging or shrinking of a figure on a plane or coordinate system by a scale factor.

**Scale Factor:** The amount the x and y-values are multiplied by to calculate the new coordinates of the figure.



**Draw each figure.**

A square with side = 4



The dilation with scale factor (3,3) of a square with side = 4



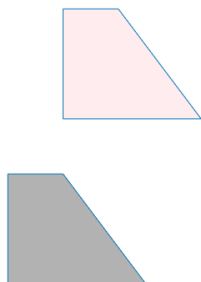
The dilation with scale factor (3,1) of a square with side = 4



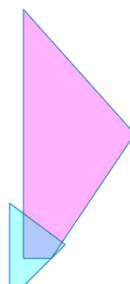
The resulting shape is a \_\_\_\_\_

The resulting shape is a \_\_\_\_\_

**5.** What transformation is shown?

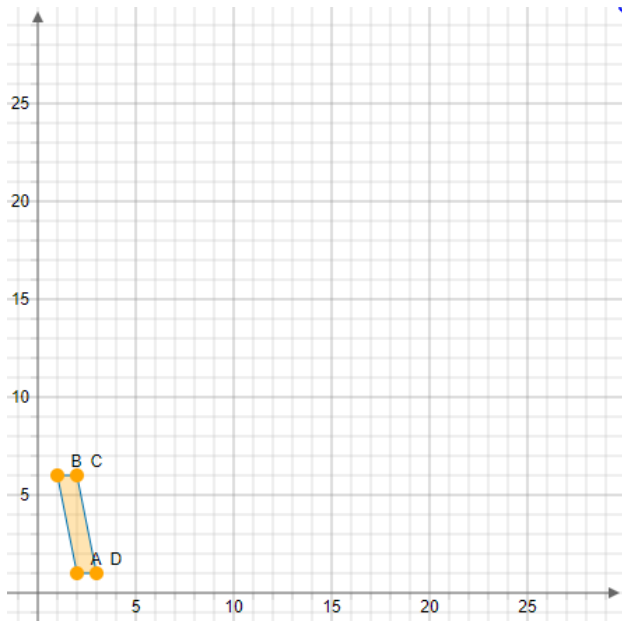


**6.** What transformation is shown?



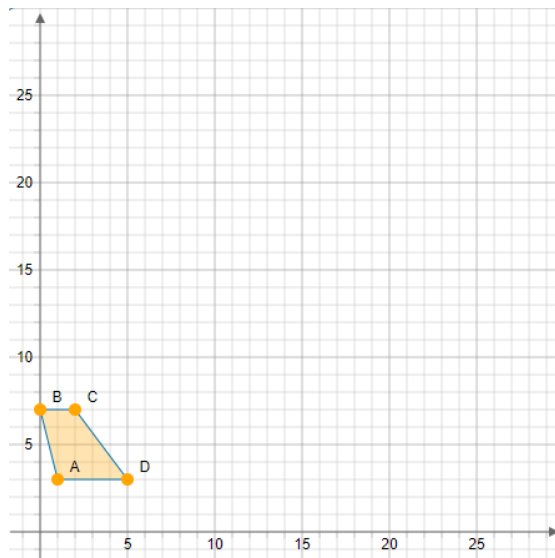
**7.** Plot the dilation of the quadrilateral with a (2,3) scale factor.

Quadrilateral ABCD is best defined as a \_\_\_\_\_



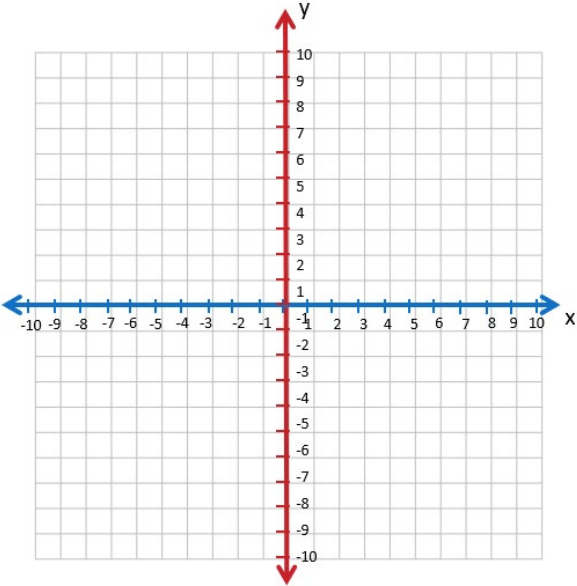
Plot the dilation of the quadrilateral with a (3,4) scale factor.

Quadrilateral ABCD is best defined as a \_\_\_\_\_

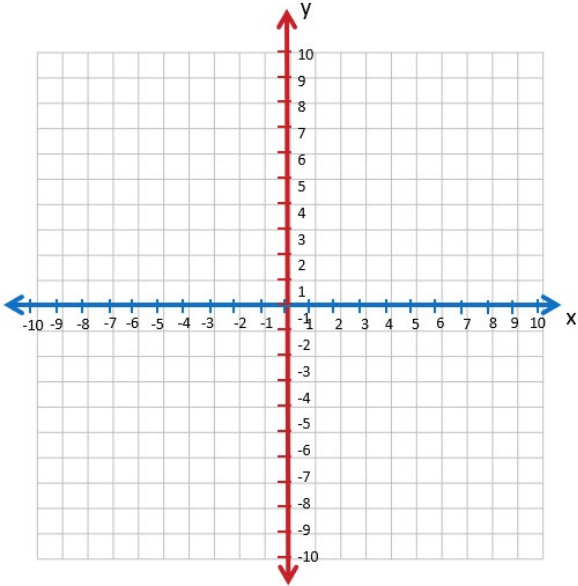


III. Practice

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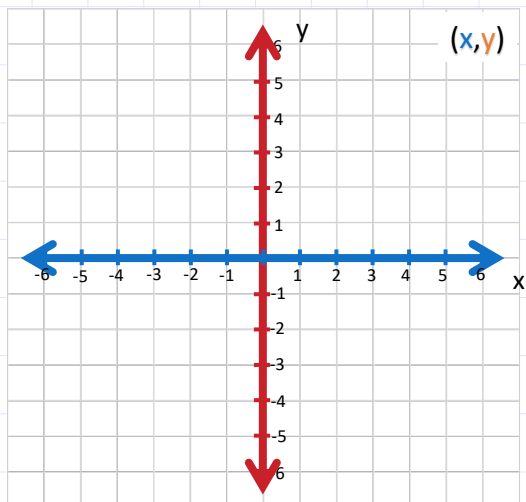
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