Vocabulary Unit 4

Module 9: Transformations and Congruence

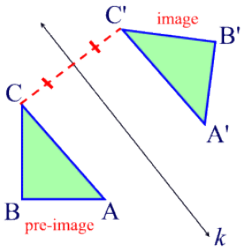
(9.1) **transformation**: a function that describes the change in position, size, or shape of a figure.

Example: translation, reflection, rotation

(9.1) **preimage**: the input of a transformation.

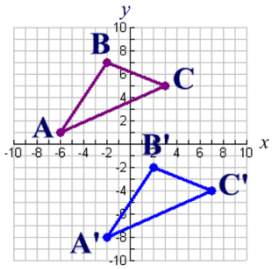
(9.1) **image**: the output of a transformation.

Example:



(9.1) **translation**: a transformation that slides an image along a straight line.

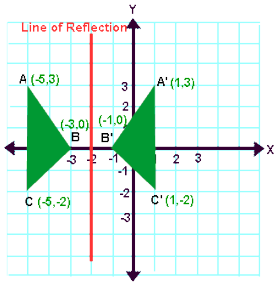
Example:



(9.2) **reflection**: a transformation that flips a figure across a line.

(9.2) **line of reflection**: the line a figure is flipped across.

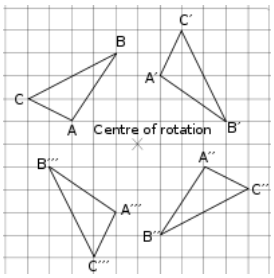
Example:



(9.3) **rotation**: a transformation that turns a figure around a given point.

(9.3) **center of rotation**: the point which a figure is rotated around.

Example:

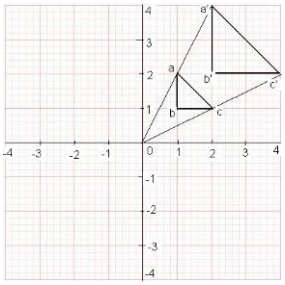


Module 10: Transformations and Similarity

(10.1) **dilation**: a transformation that changes the size (not the shape) of a figure.

(10.1) **center of dilation**: the fixed point where the lines of the corresponding parts of figures intersect.

Example:



(10.1) **enlargement**: a dilation producing a larger figure.

(10.1) **reduction**: a dilation producing a smaller figure.

(10.1) **scale factor**: the ratio of a length of the image to the length of the corresponding part on the original figure.

Example: $\frac{A'B'}{AB}$

(10.3) **similar**: figures have the same shape but may be different sizes.