

Teacher

Dilations

A **dilatation** is a geometric transformation that allows any mirror image to be associated with an initial image according to a fixed point, called the **centre of dilatation**, and a ratio, called the **scale factor of a dilatation**.

Initial Point (Original) A

Image Point (mirror or the "new") A'

Constructing a Dilatation

You must have:

- A centre of dilatation
- A scale factor or ratio

Example 1: Find the image of triangle ABC using **Scale factor of 2**

Step 1

Draw a line through each point to the center of similarity.

Step 2

Measure the distance between the point and the center.

Step 3

Multiply the distance found with the ratio of similarity [scale factor]

Step 4

Measure your image point from the center. Plot and label.

