






# Omotetie. Transformarea de asemanare



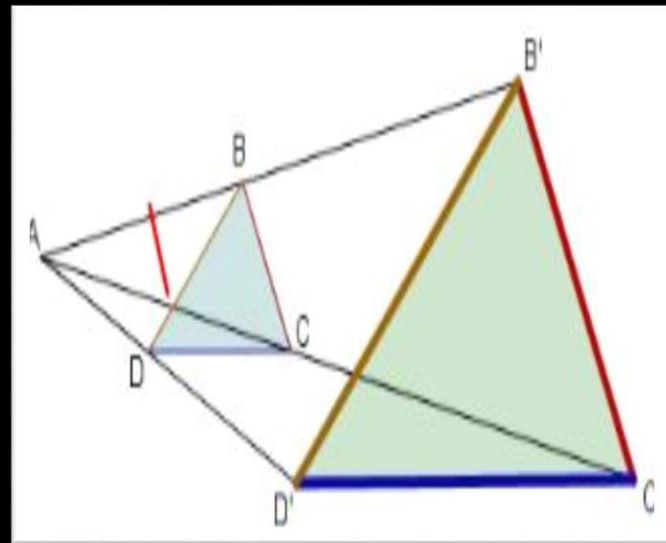


# Motto

- Doua figuri se numesc figuri omotetice daca exista o omotetie a spatiului care aplica una din aceste figure pe cealalta.
  - Omotetia este un caz particular al asemanarii.
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# Definitie

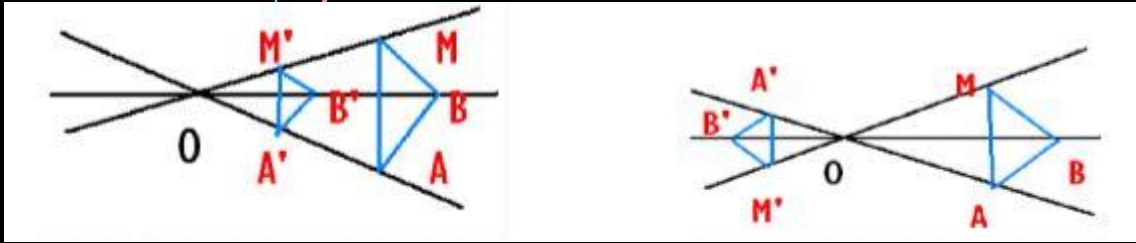
Fie  $k$  un numar real pozitiv. Se numeste transformare de asemanare de coeficient  $k$  a spatiului aplicatia spatiului in el insusi care pentru orice doua puncte  $A, B$  si imaginile lor respective  $A', B'$  satisface conditia  $A'B' = kAB$

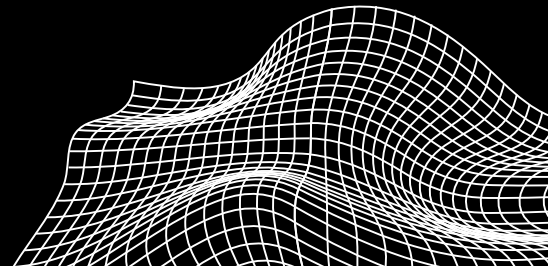
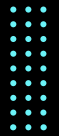
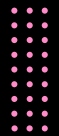
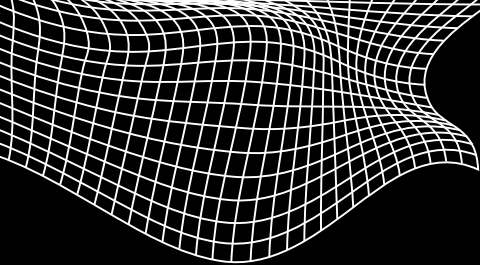


# Teorema

1. Compunerea a doua asemanari de coeficienti  $k_1$  si  $k_2$  este o asemanare de coeficient  $k_1 k_2$ .
2. Transformarea inversa asemanarii de coefficient  $k$  este o asemanare de coeficient  $1/k$

# Omotetie de Centru





• Sostituendo nell'equazione

$x^2 + y^2 = 9$ , si ottiene:

$$\frac{x^2}{16} + \frac{y^2}{16} = 9 \quad \text{cioè:}$$

$$x^2 + y^2 = 144$$

