

# Unit 3

## Lesson 1

\*  $Z_1 \sim Z_2$  « $ABCD \sim xyML$ »:

IP ①  $\angle A = \angle x$

$\angle B = \angle y$

$\angle C = \angle M$

$\angle L = \angle D$

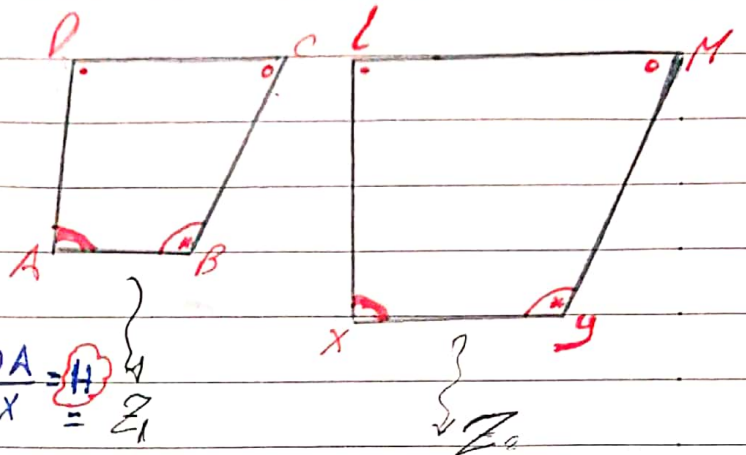
$$\textcircled{2} \frac{AB}{xy} = \frac{BC}{yM} = \frac{CD}{ML} = \frac{DA}{Lx} = H = Z_1$$

IP  $H > 1 \rightarrow Z_2$  Calargement  $Z_1$

$0 < H < 1 \rightarrow Z_2$  Shrinking  $Z_1$

$H = 1 \rightarrow Z_2$  Congruent  $Z_1$

زكبر  $Z_2$   
 ضمير  $Z_2$   
 مقابلة  $Z_2$



\* 
$$\frac{\text{Perimeter of } Z_1}{\text{Perimeter of } Z_2} = H$$

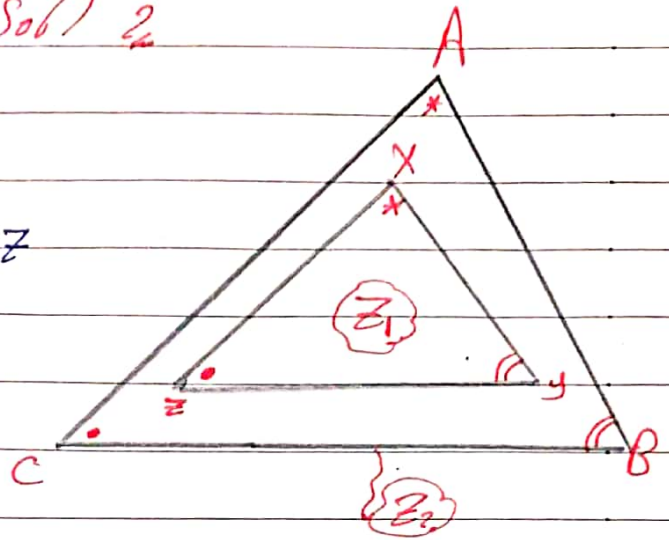
## Lesson 2

IS

$$\angle A = \angle x$$

$$\angle B = \angle y \quad \therefore \triangle ABC \sim \triangle xyz$$

$$\frac{xy}{AB} = \frac{yz}{BC} = \frac{zx}{CA}$$



IS

$$\triangle ABC \sim \triangle DAC \sim \triangle DBA$$

$$(AB)^2 = DB \times BC$$

$$(AC)^2 = DC \times BC$$

$$(DA)^2 = DB \times DC$$

