

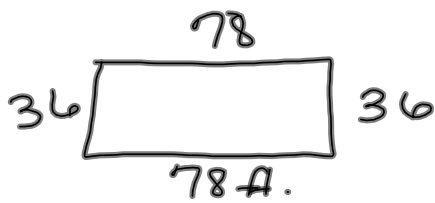
$$\frac{0.05}{\frac{\times 10}{50}}$$

$$\frac{0.10}{\frac{\times 5}{50}}$$

$$\frac{0.25}{\frac{\times 2}{50}}$$

Total





$$\frac{1}{3}(78) + 10 =$$

## 4-5 Similar Polygons

ratio proportions

$$\frac{1}{4} = \frac{8}{n} \quad (32)$$

32 ←

→ 32

Equal

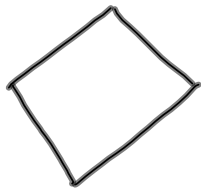
Polygon —  
closed  
plane (not 3d)  
3+ line segments



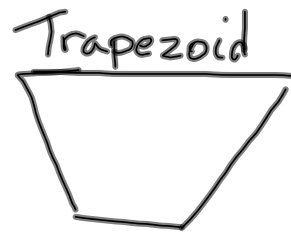
Similar  
Same shape

$$ABCD \sim EFGH$$

Congruent (=)  
exactly the same  
Same size  
Same shape



Rhombus



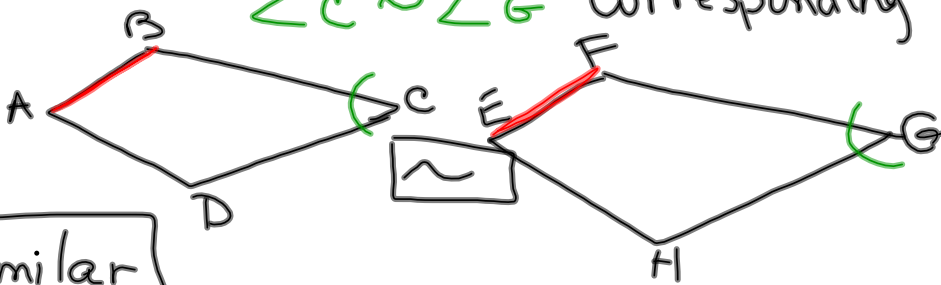
Similar Shapes

Parts match = corresponding

$\overline{AB} \sim \overline{EF}$

$\angle C \sim \angle G$

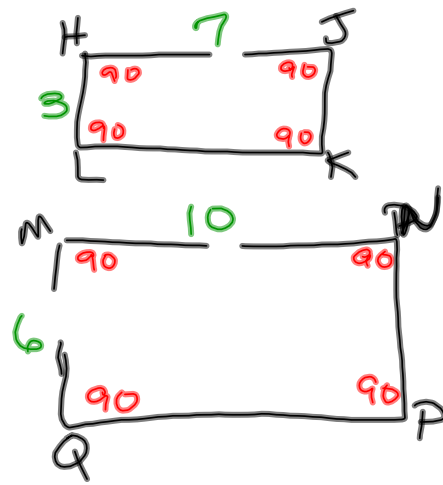
corresponding sides  
corresponding angles



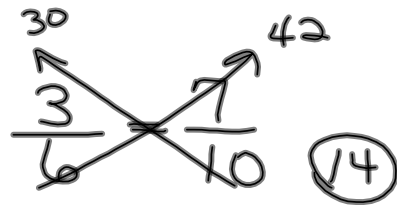
Similar

Corresponding angles are congruent

Corresponding sides are proportional



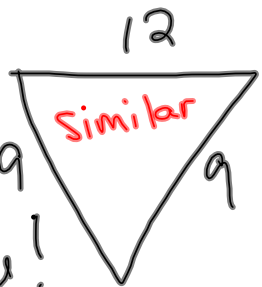
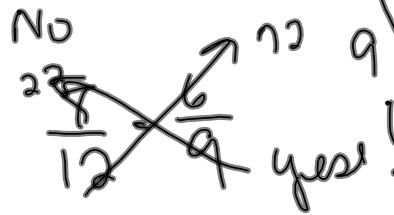
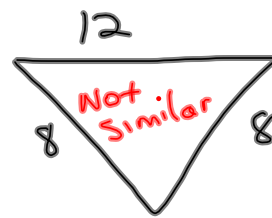
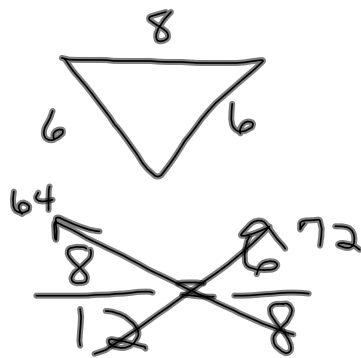
Similar ?



# Isosceles

2 side same

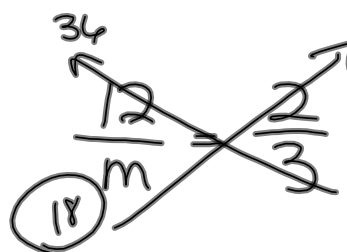
$180^\circ$  sum





scale factor

$$\frac{2}{3}$$



$$\overline{AD} = 13$$

