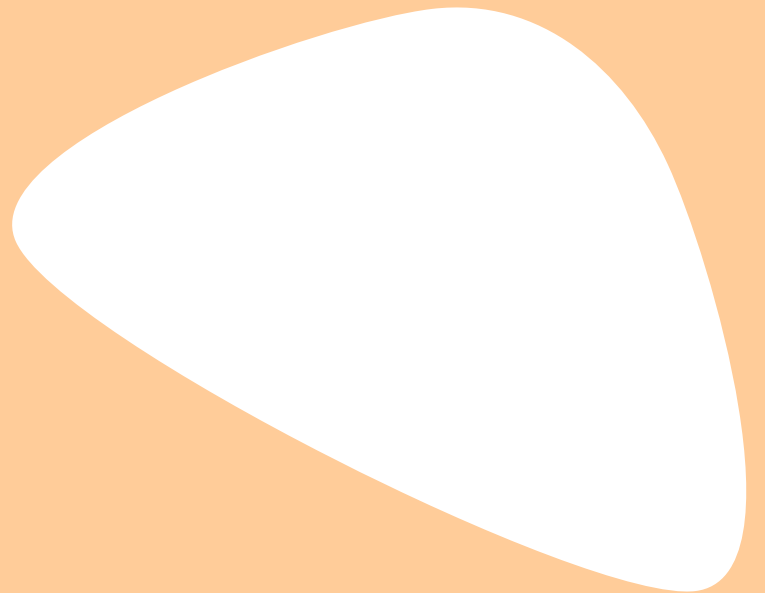
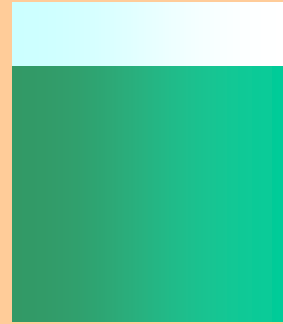
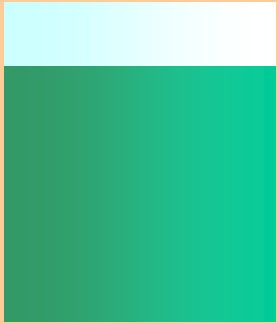
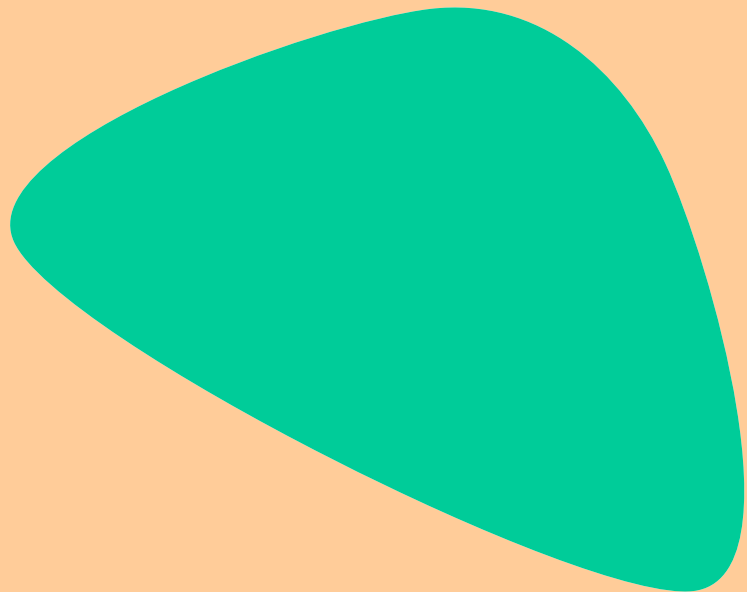
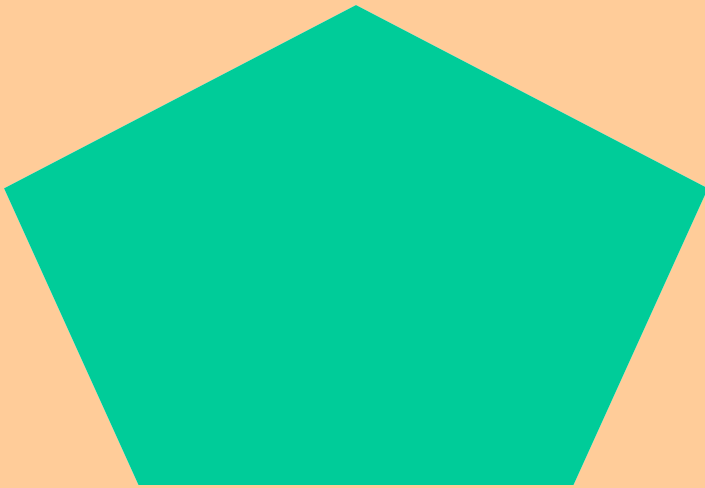


# **EQUIVALENZA DI FIGURE PIANE**





Due figure piane si dicono  
**EQUIVALENTI** o **EQUIESTESE**  
se hanno la stessa

**ESTENSIONE  
SUPERFICIALE**



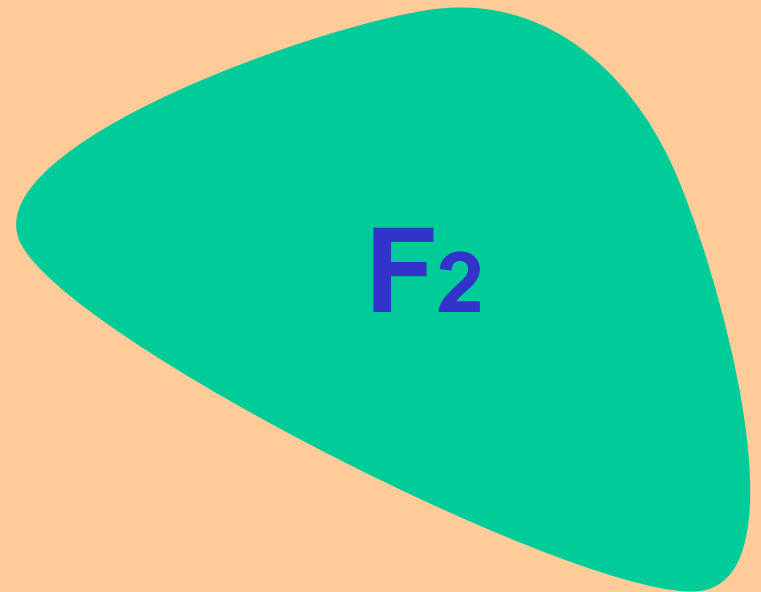
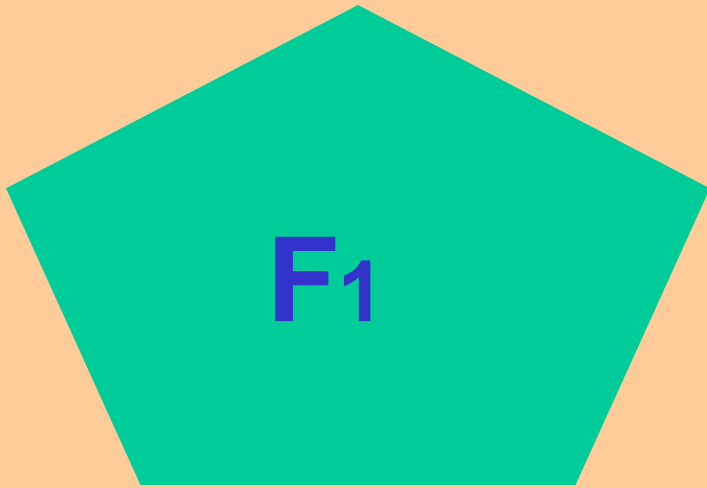
# CONCETTO PRIMITIVO



**ESTENSIONE  
SUPERFICIALE**

Se  $F_1$  è equivalente a  $F_2$  si scrive:

$$F_1 \doteq F_2$$



La relazione “essere equiesteso a” è:

• riflessiva  $F \doteq F$

• simmetrica  $F_1 \doteq F_2 \Rightarrow F_2 \doteq F_1$

• transitiva  $F_1 \doteq F_2 \wedge F_2 \doteq F_3$   
 $\Rightarrow F_1 \doteq F_3$

La relazione “essere  
equiesteso a” è:

**RELAZIONE DI  
EQUIVALENZA!**

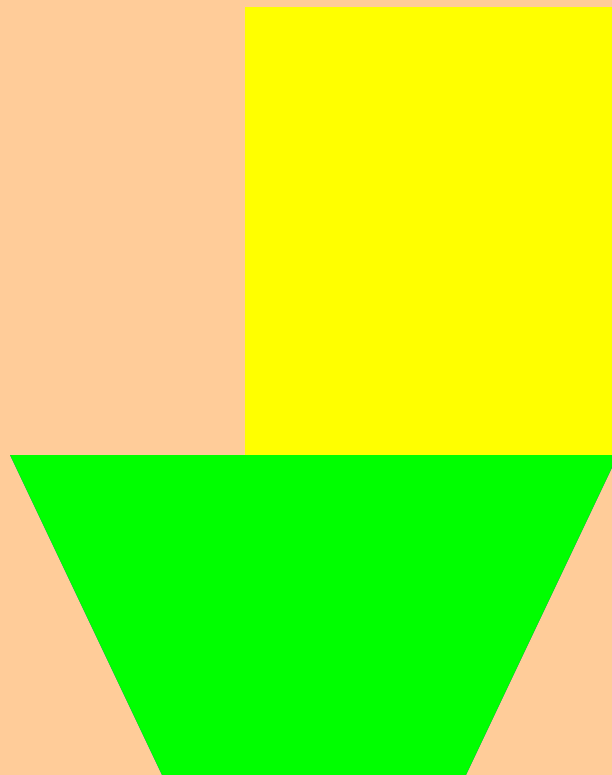
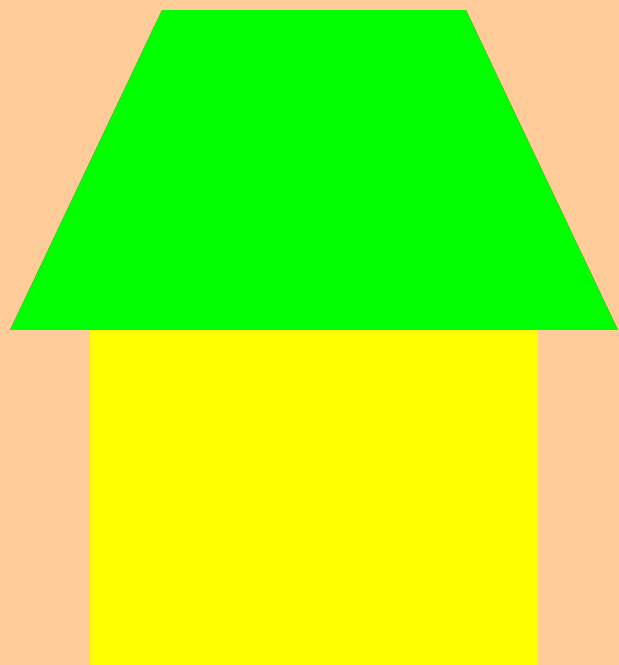


# ALTRE PROPRIETÀ

- **Se due figure sono congruenti allora sono anche equivalenti**
- **Somme di figure equivalenti sono equivalenti**

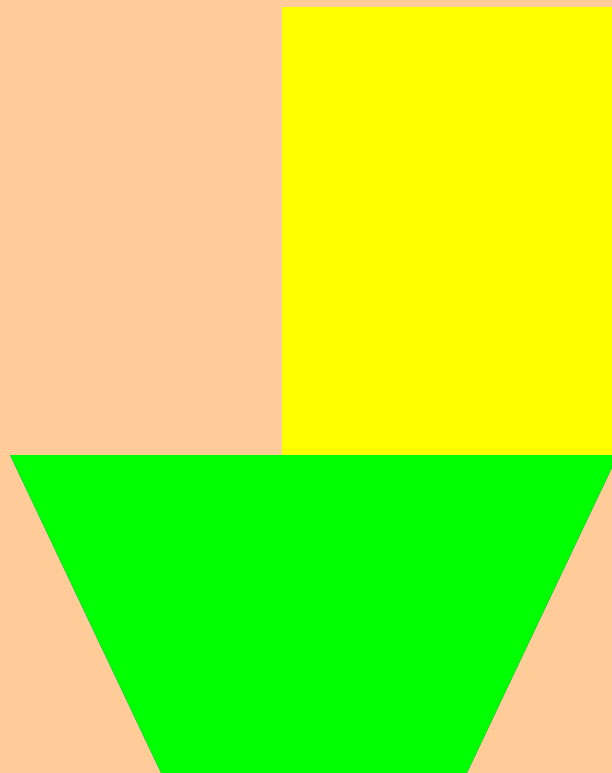
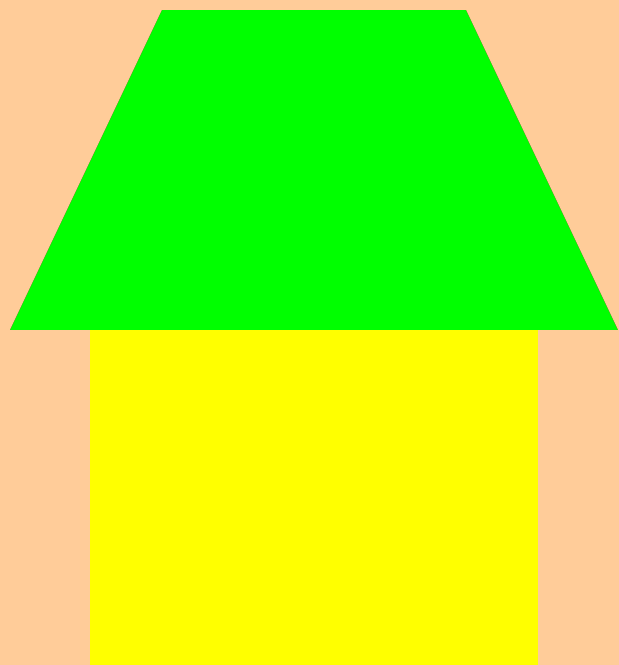
**Definizione:**

**due figure si dicono  
EQUISCOMPONIBILI se è  
possibile suddividerle  
rispettivamente in più  
figure a due a due  
equivalenti**

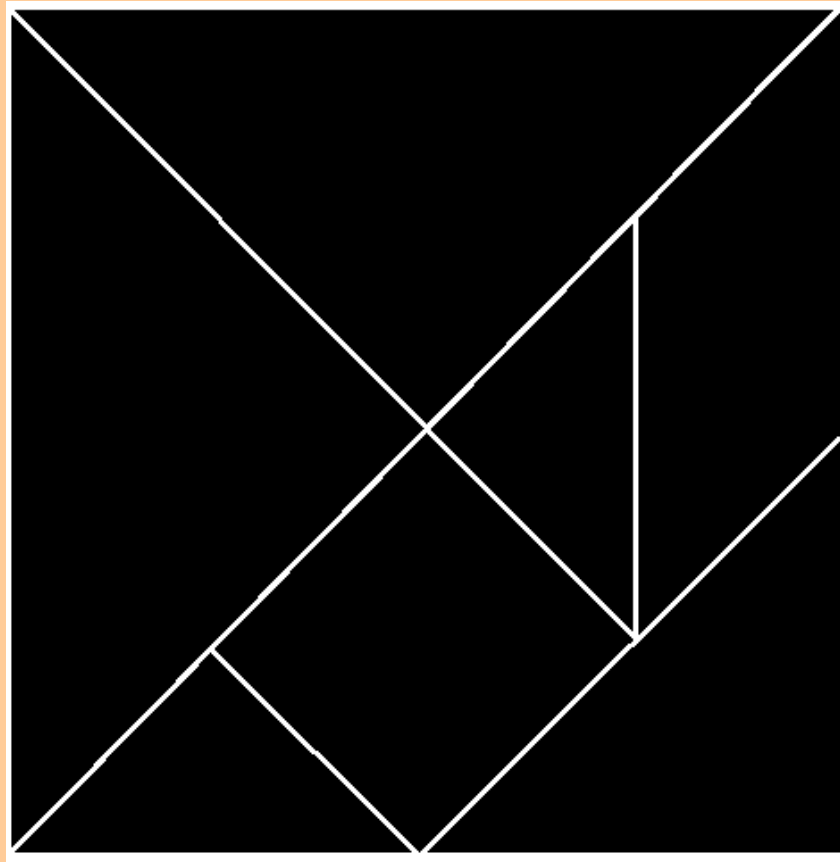


# ALTRE PROPRIETÀ

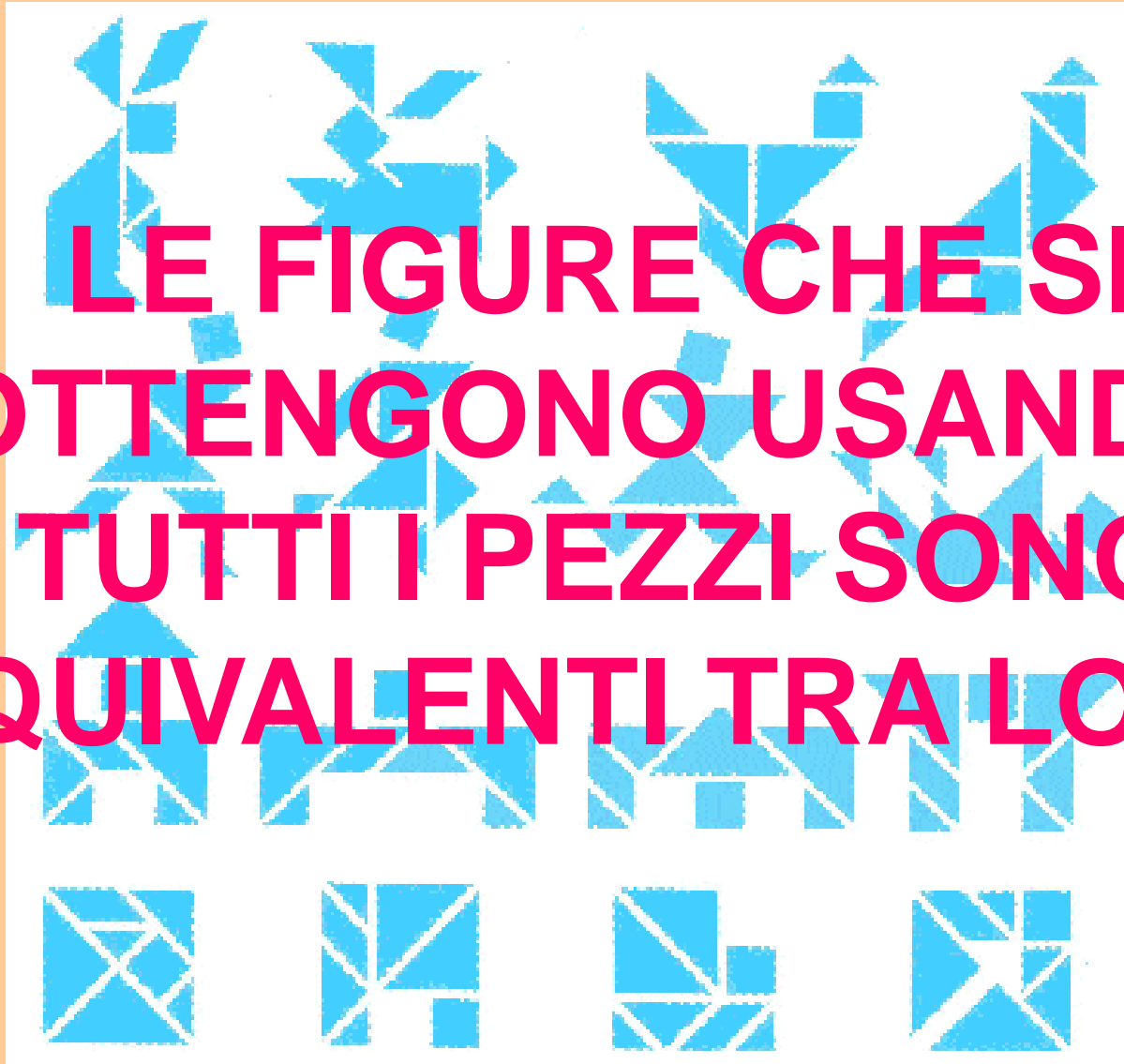
- **Se due figure sono equiscomponibili allora sono equivalenti**

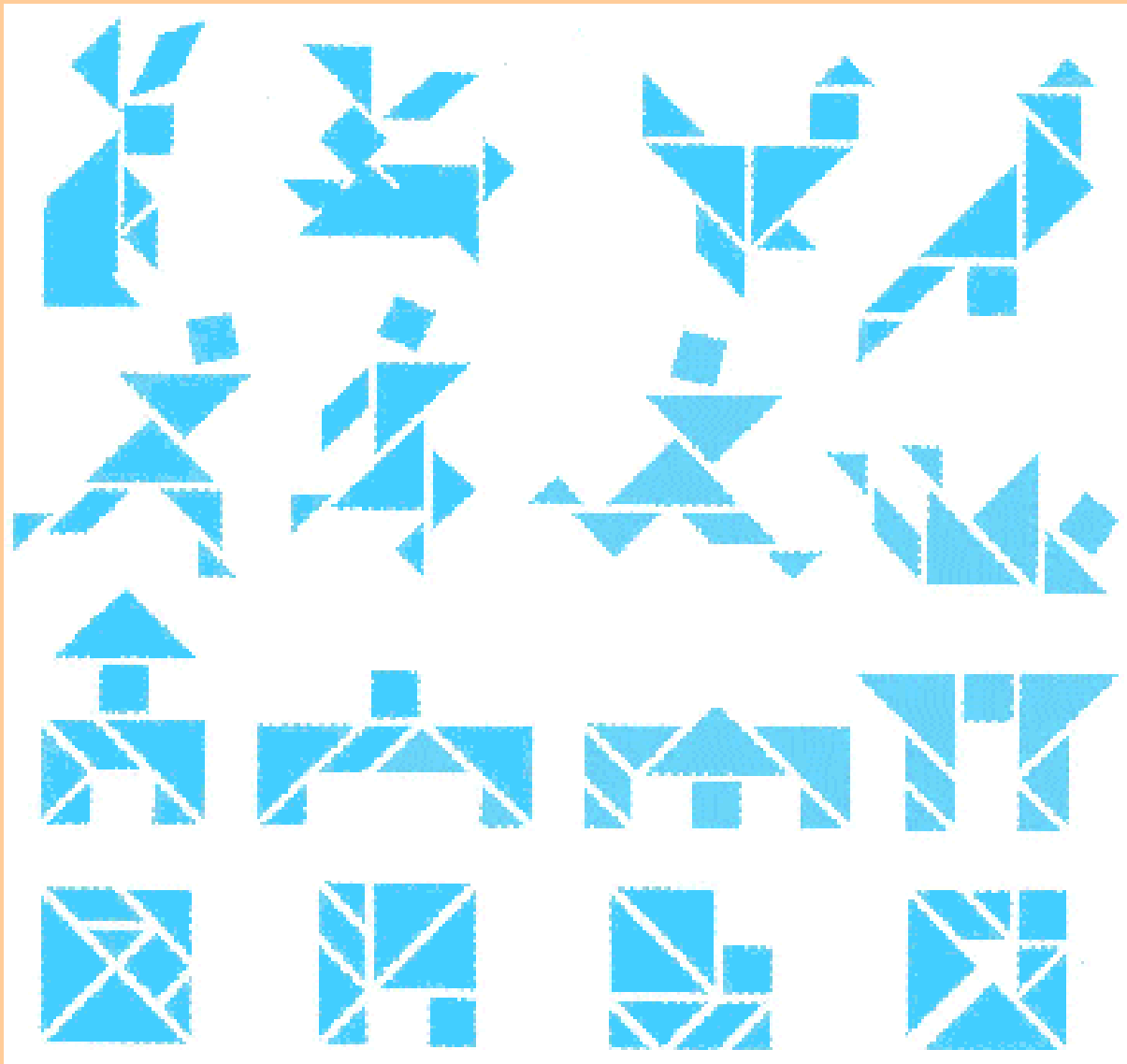


**AVETE PRESENTE IL  
TANGRAM?**



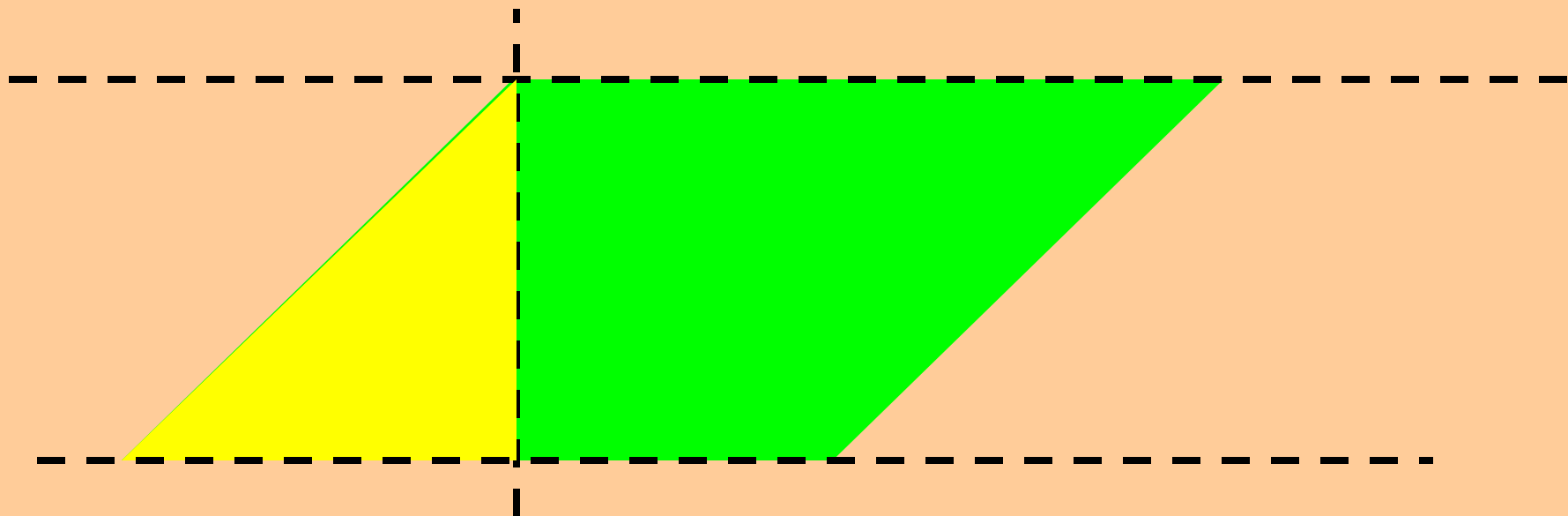
**LE FIGURE CHE SI  
OTTENGONO USANDO  
TUTTI I PEZZI SONO  
EQUIVALENTI TRA LORO**



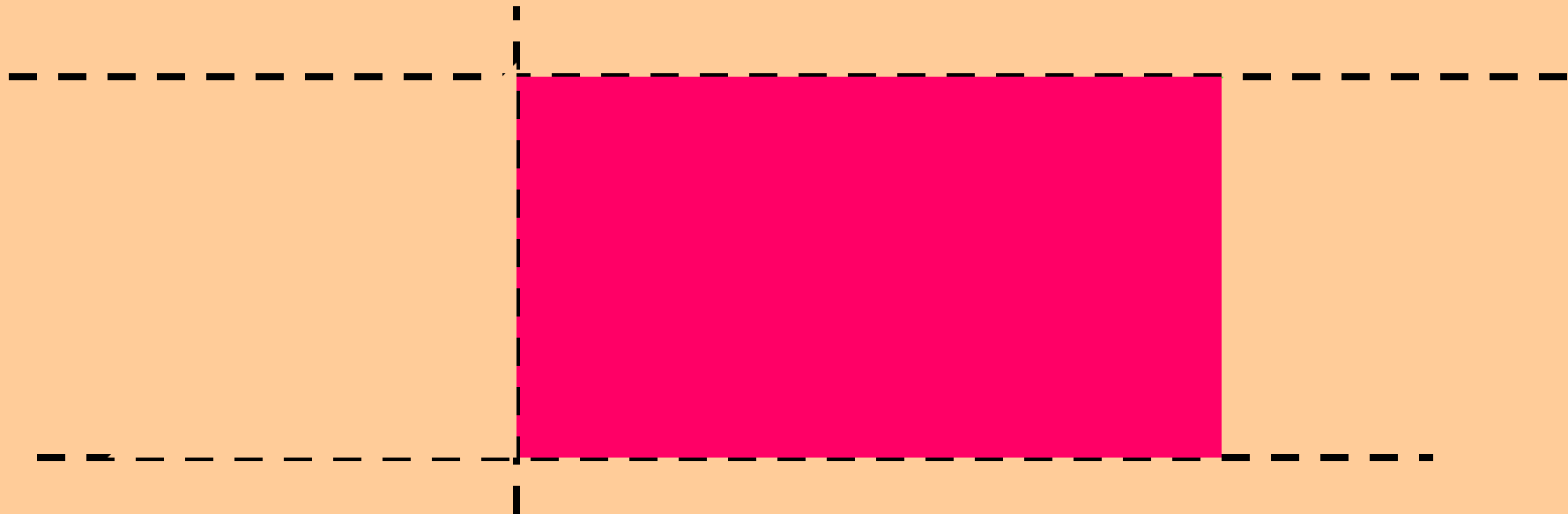




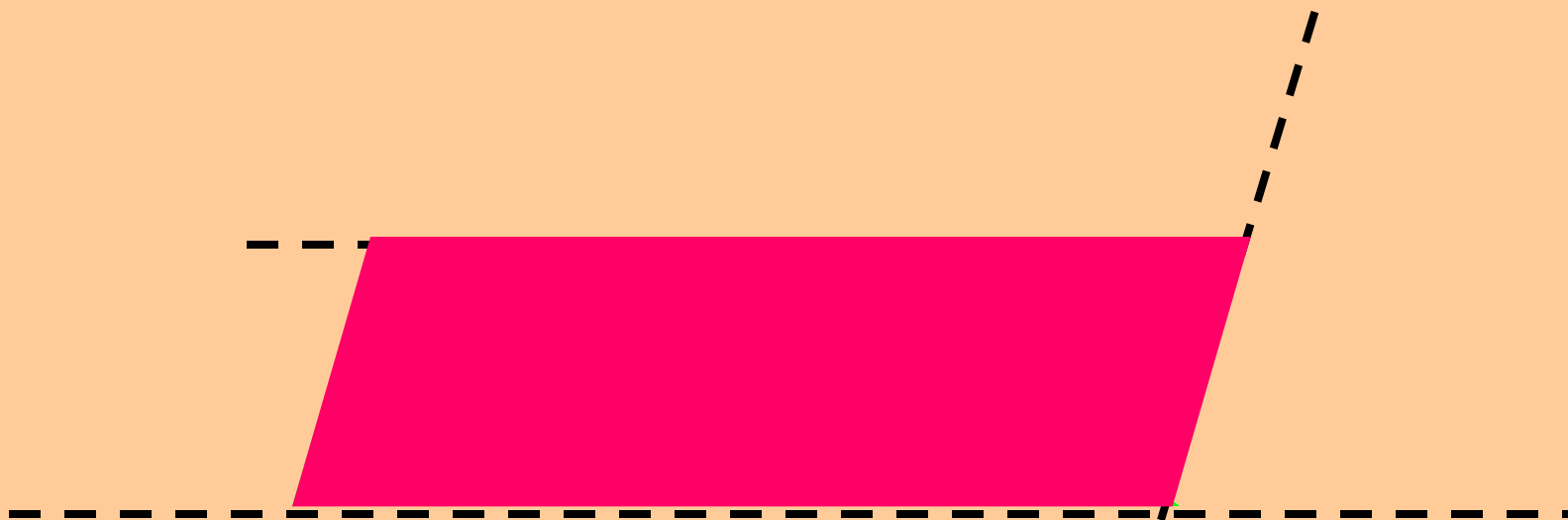
# PARALLELOGRAMMI



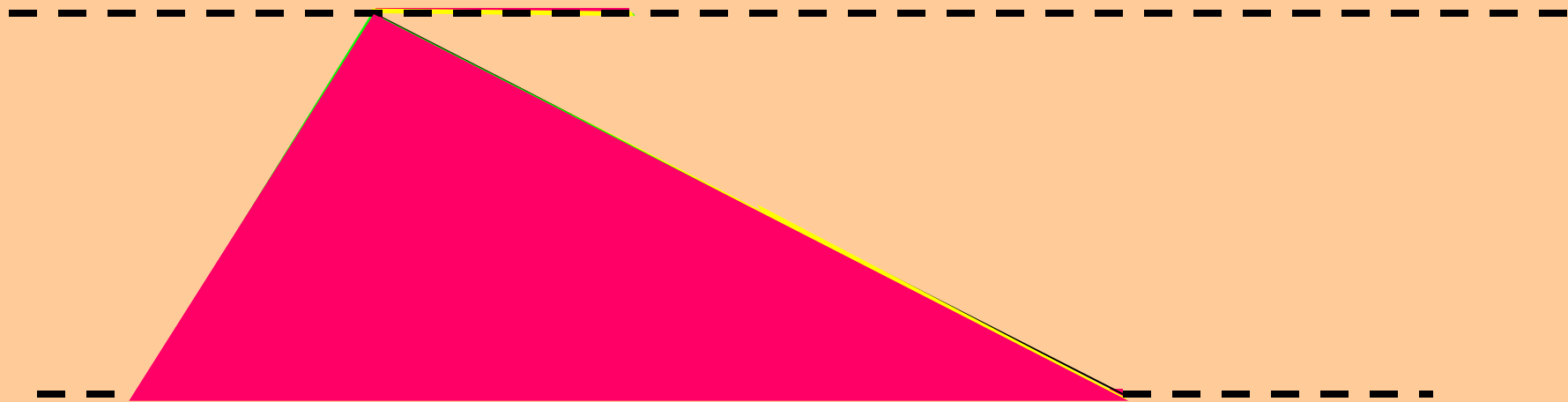
# PARALLELOGRAMMI



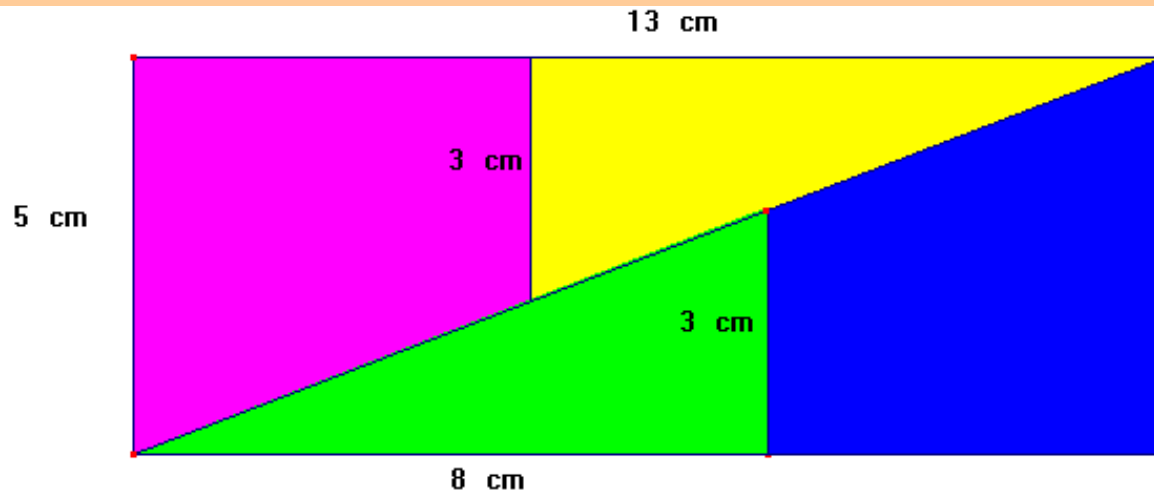
# TRIANGOLI



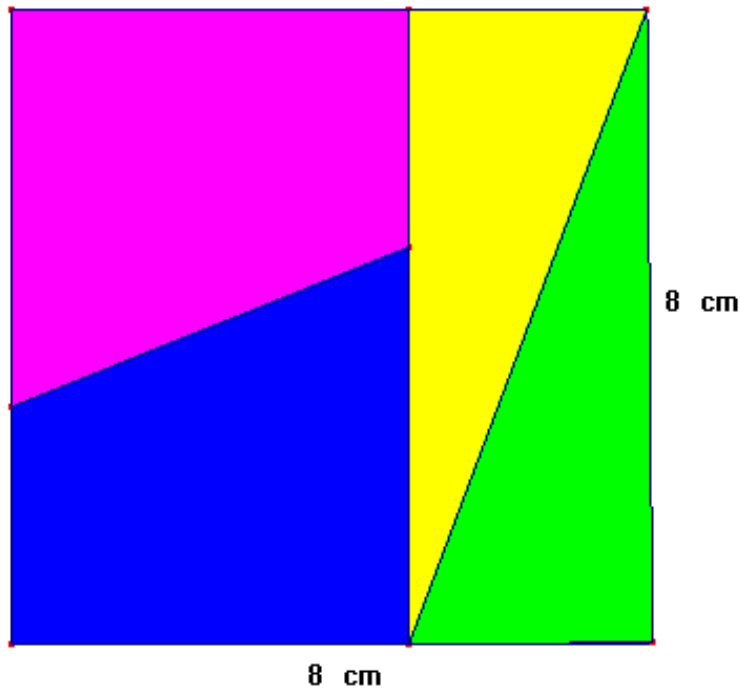
# TRAPEZI



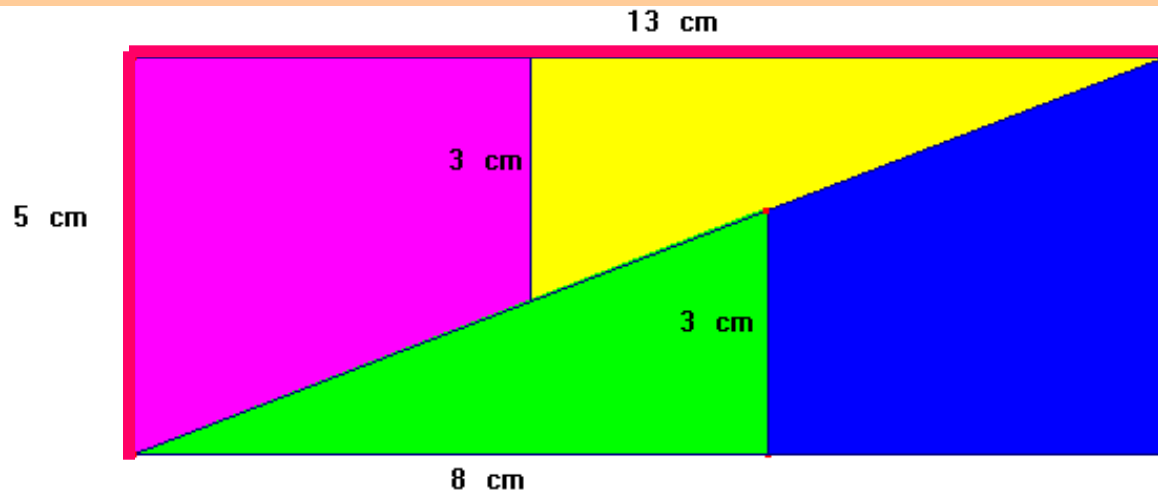
**E ADESSO...  
UN “MISTERO”  
DELL’EQUISCOMPONIBILITÀ**



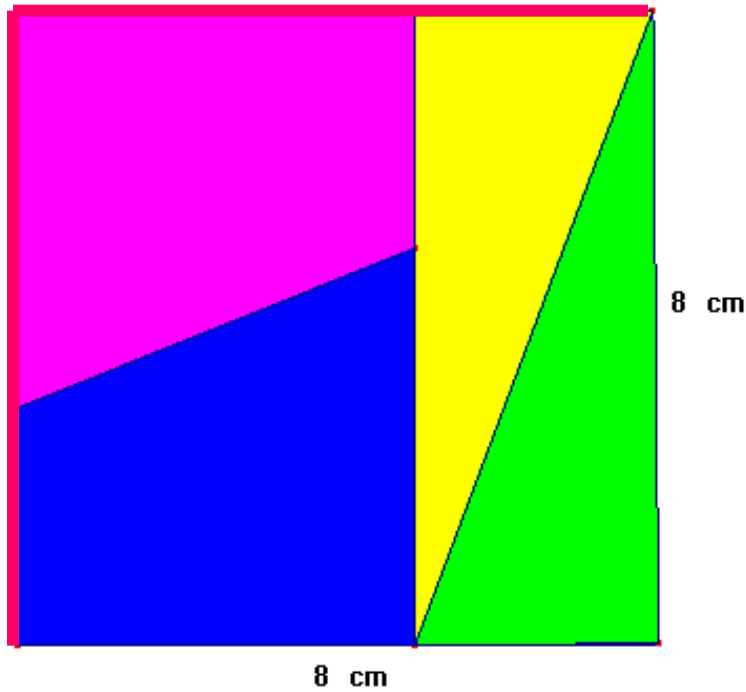
**TUTTO  
BENE?**



**PROVATE A  
CALCOLARE  
LE AREE DEL  
RETTANGOLO  
E DEL  
QUADRATO...**



$$13 \times 5 = 65 \text{ cm}^2$$



$$8 \times 8 = 64 \text{ cm}^2$$

???

**CERCATE DI SVELARE IL  
“MISTERO DELLA  
SCOMPARSA DEL  
CENTIMETRO QUADRATO”**