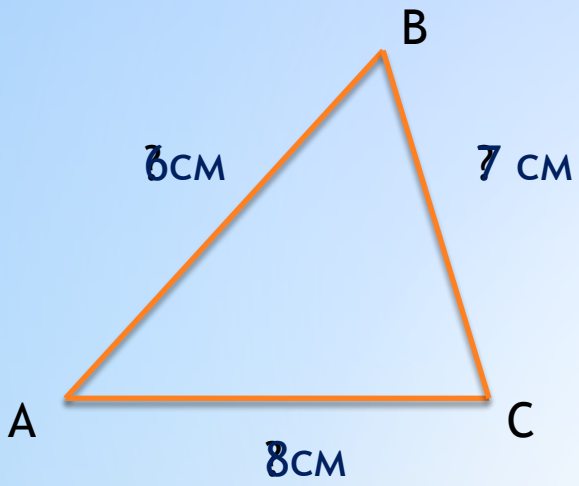
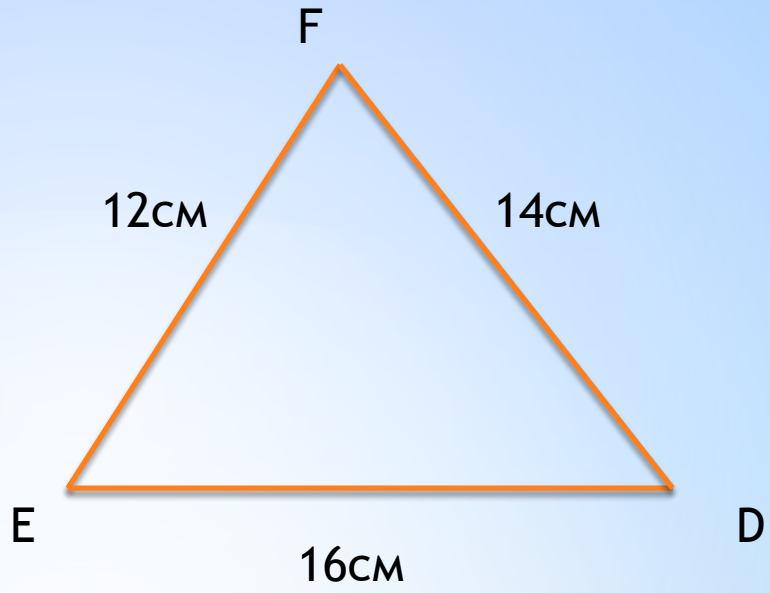
# Подобие треугольников



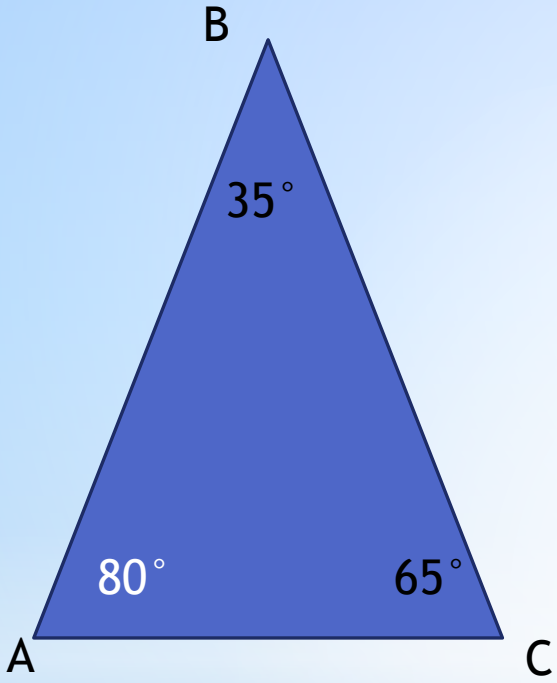



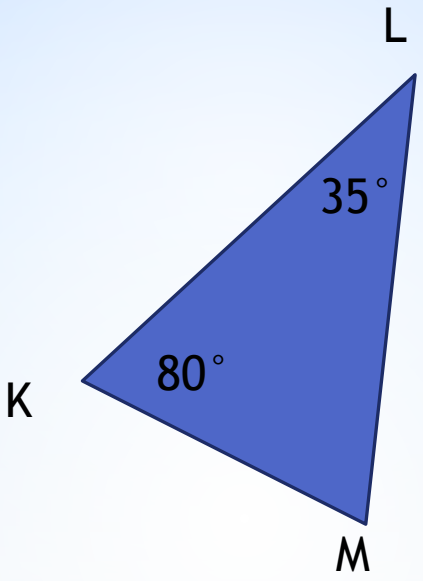

Дано:

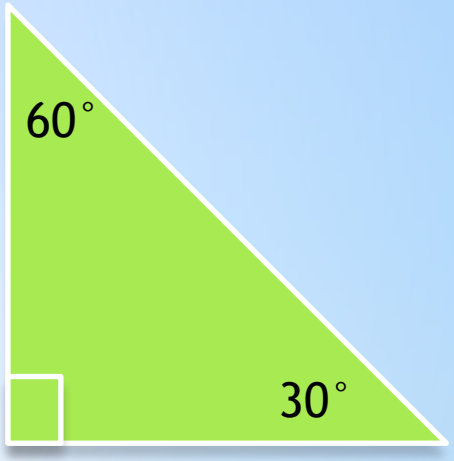
$$\frac{EF}{AB} = \frac{2}{1};$$

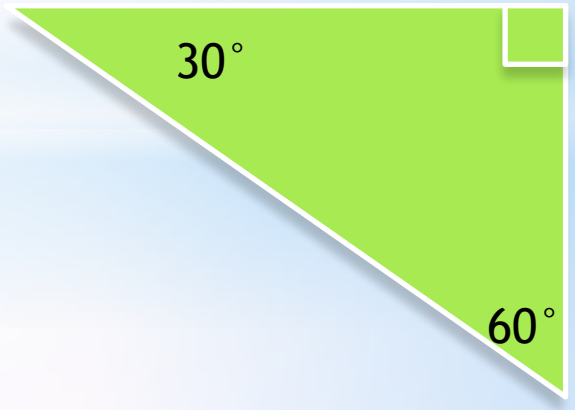
$\triangle ABC$

# Подобны ли треугольники?

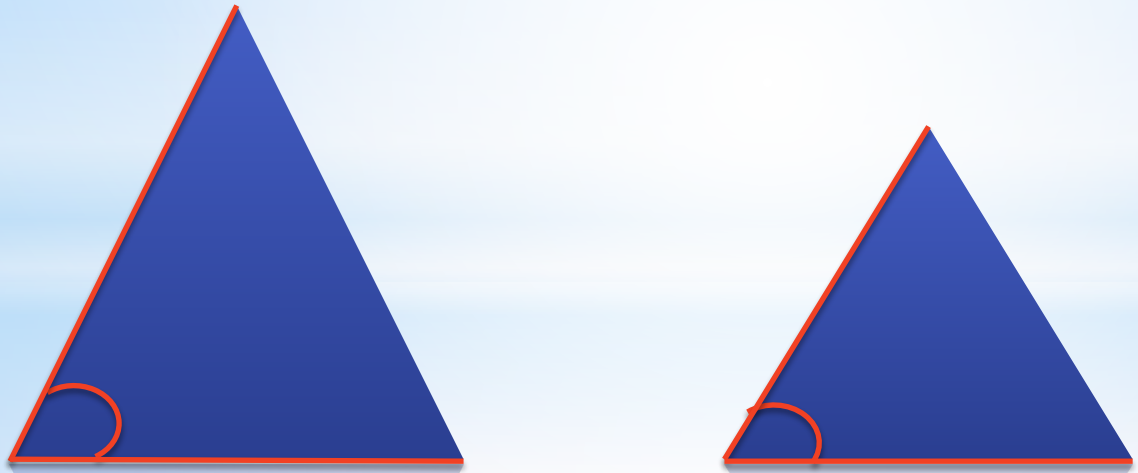


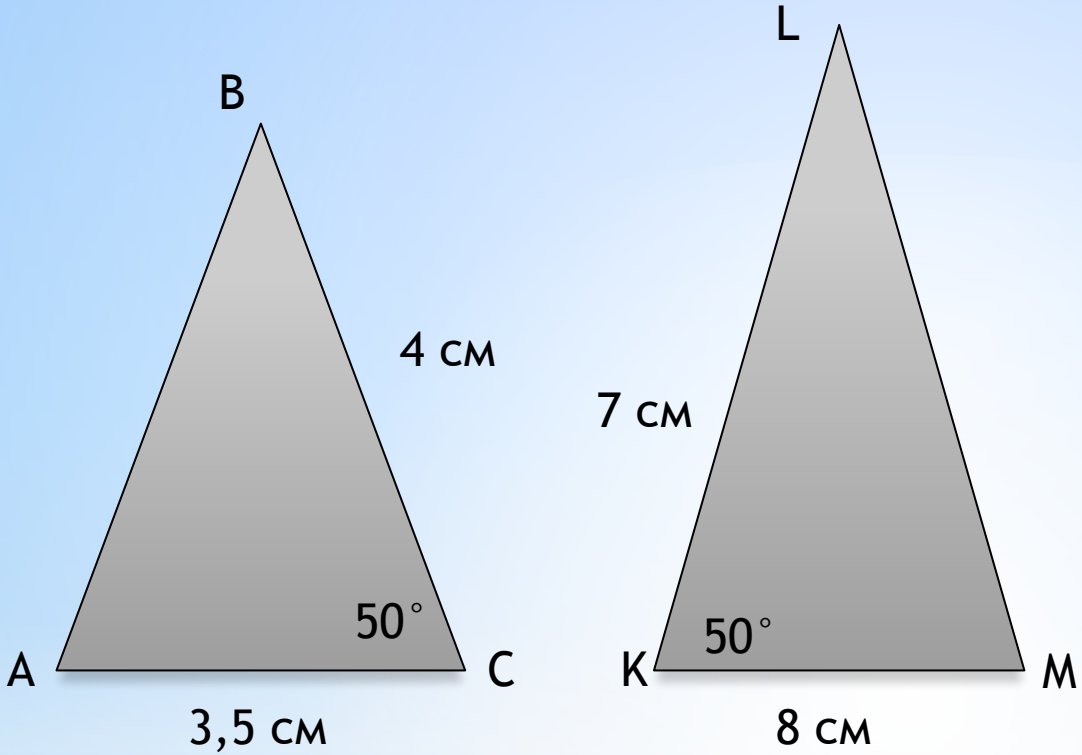



# Второй признак подобия треугольников



# Докажите подобие треугольников

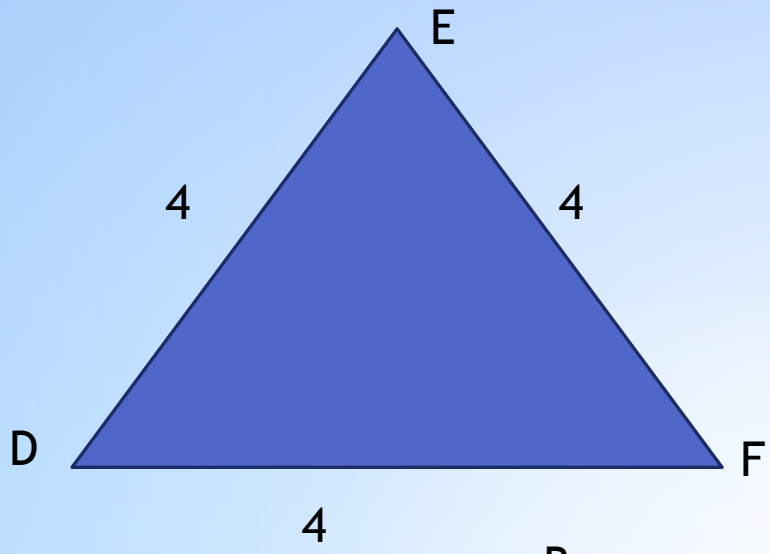


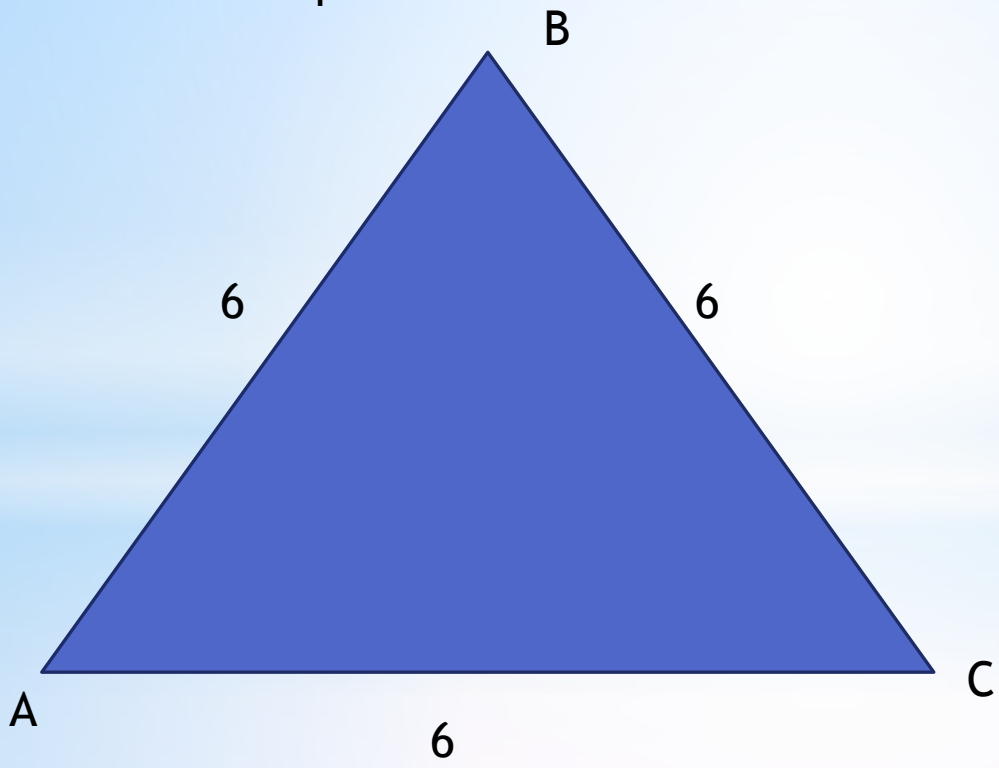

$$\angle C = \angle K$$

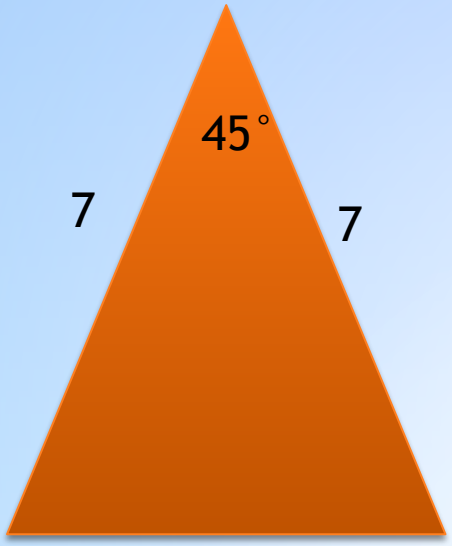
$$\frac{KM}{BC} = \frac{8}{4} = 2$$

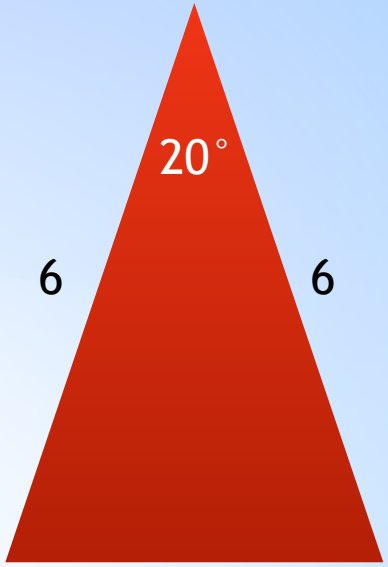
$$\frac{KL}{AC} = \frac{7}{3,5} = 2$$

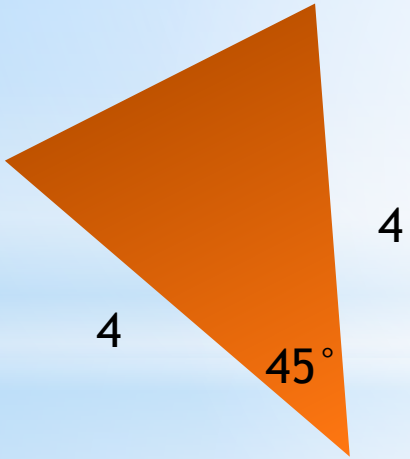
$$\Rightarrow \quad \triangle KLM \sim \triangle ABC$$

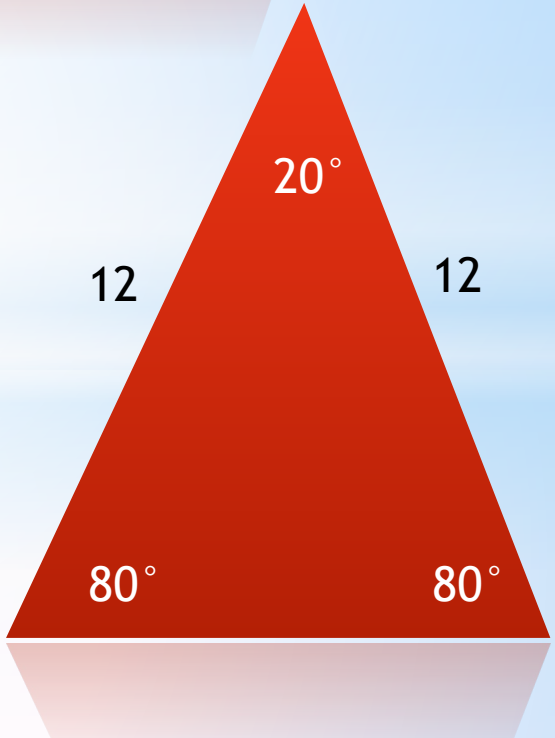

E
4
4
D
F
4


B
6
6
A
C
6

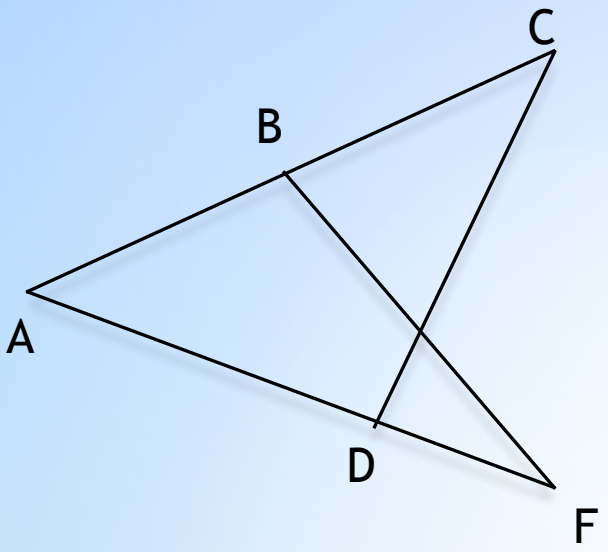

45°
7
7


20°
6
6


4
4
45°


20°
12
12
80°
80°

# № 559



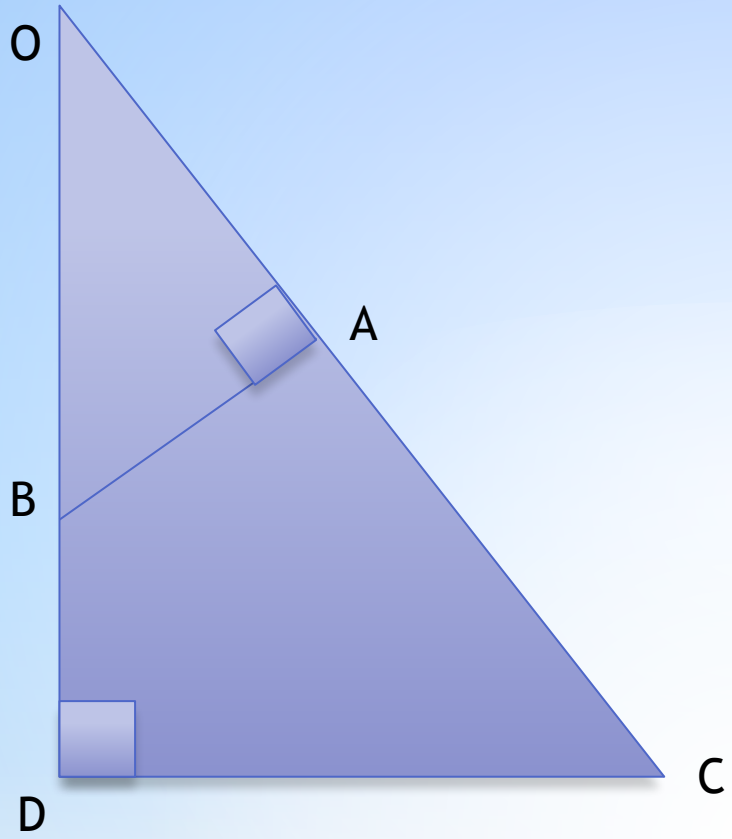

Док -во:

$\angle A$ – общий

$$\frac{AC}{AD} = \frac{16}{8} = 2$$

$$\frac{AF}{AB} = \frac{10}{5} = 2$$

$\Delta ADC \sim \Delta ABF$ по второму признаку подобия




Дано:

OA = 6 см, AC = 15 см

OB = 9 см, BD = 5 см

AB = 12 см

Найти: CD

## Решение:

$$\frac{CD}{AB} = \frac{OC}{OB}$$

$$\frac{CD}{12} = \frac{6+15}{9}$$

$$CD = \frac{12 \cdot 21}{9} = 28 \text{ см}$$

Д.З.
п.60
№ 604