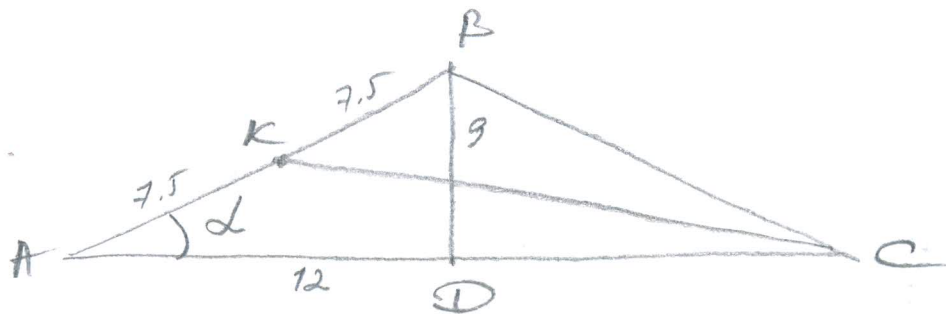


$$AD = DC = 12$$

$$BD = 9$$



AB по Тл Пифагора

$$1. \quad AB = \sqrt{12^2 + 9^2} = 15$$

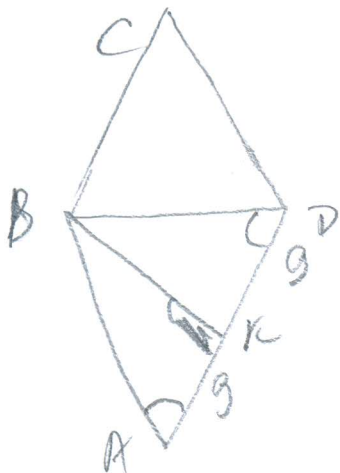
$$2. \quad \sin \alpha = \frac{BD}{AB} = \frac{9}{15} = 0.6$$

3. KC ищем по теореме косинусов

$$KC = \sqrt{AK^2 + AC^2 - 2 \cdot AK \cdot AC \cdot \cos A}$$

$$\text{Если } \sin \alpha = 0.6, \text{ то } \cos \alpha = \sqrt{1 - \sin^2 \alpha} = 0.8$$

$$KC = \sqrt{7.5^2 + 24^2 - 2 \cdot 7.5 \cdot 24 \cdot 0.8} = \sqrt{344.25} = 4.5\sqrt{17}$$



Если $BD \perp AD$ и $AK = KD$
то $AB'D$ - ромб. $\Delta \Rightarrow$

$$\angle A = \angle A'DB, \text{ и } \angle$$

$$\angle A'DB = \angle B'DC, \text{ а } \angle A'DB + \angle B'DC = 180^\circ \Rightarrow \angle A = 60^\circ$$

$$\angle D = 120^\circ$$