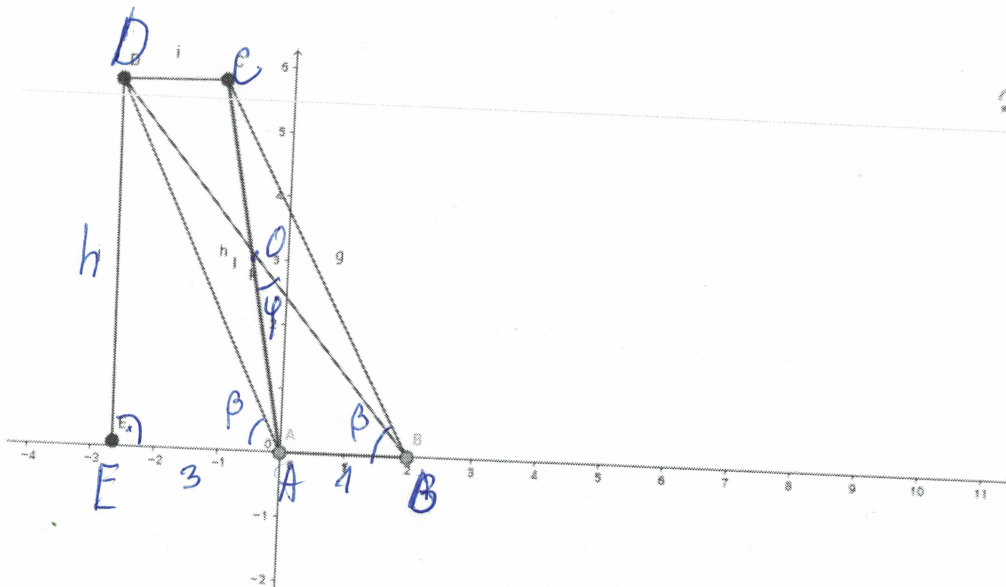




$$AB = BE - AE = 1 \text{ cm.}$$

$$\text{O} \triangle \text{AED} \Rightarrow \frac{\text{AE}}{\text{AD}} = \cos \beta \Rightarrow \text{AD} = \frac{3}{\cos \beta} \quad \text{u} \quad h = 3 \tan \beta$$

$$O_T \propto BDE \Rightarrow Bg^2 = BE^2 + h^2$$

$$Bg^2 = 4^2 + g t g^2 B$$

$O + T \text{ zanyu } ABCD \Rightarrow AC^2 + BD^2 = 2AB^2 + 2AD^2$
 $(2\sqrt{29})^2 + (4^2 + 9\cos^2\beta) = 2 \cdot 1^2 + 2 \cdot \left(\frac{3}{\cos\beta}\right)^2$
 $116 + 16 + \frac{9 \sin^2\beta}{\cos^2\beta} = 2 + \frac{18}{\cos^2\beta} \Rightarrow$

$$130 \cos^2 \beta + 9 \sin^2 \beta = 18$$

$$130(1 - \Delta n^2/\beta) + 90\Delta n^2/\beta = 18 \Rightarrow \Delta n^2/\beta = \frac{112}{121}$$

$$\Rightarrow \sin \beta = \frac{4\sqrt{7}}{11} \quad \Rightarrow \cos \beta = \frac{3}{11} \quad (\sin^2 \beta + \cos^2 \beta = 1)$$

$$\tan \beta = \frac{\sin \beta}{\cos \beta} = \frac{4\sqrt{7}}{3} \quad , \quad h = 3 \tan \beta = 4\sqrt{7}$$

$$B\mathcal{D}^2 = h^2 + B E^2 = (4\sqrt{7})^2 + 4^2 = (8\sqrt{2})^2$$

$$\text{OT} \triangle AOB \text{ u } \cos T \Rightarrow AB^2 = AO^2 + BO^2 - 2AO \cdot BO \cdot \cos \varphi \quad \underline{BG = 8\sqrt{2}}$$

$$1^2 = (\sqrt{2}g)^2 + (4\sqrt{2})^2 - 2 \cdot \sqrt{2}g \cdot 4\sqrt{2} \cdot \cos \varphi$$

$$1 = 29 + 32 - 8\sqrt{58} \approx 4$$

$$\Rightarrow \text{mean} = \frac{60}{4} = 15$$