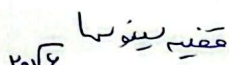


B

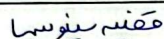
$$\rightarrow A = 120^\circ - 110^\circ = 10^\circ$$



$$\hat{c} = 110 - 0.01\omega$$

$$\hat{B} = r\omega \quad \text{und} \quad \hat{C} = v\omega^0$$

$\hat{A} \approx \hat{B} + \hat{C}$



$$\textcircled{1} \frac{e_{\text{ref}}}{A_{\text{CD}}} = \frac{a}{\sin A_1} = \frac{d}{\sin D} \rightarrow \frac{\frac{r\sqrt{r}}{r}}{\frac{r\sqrt{r}}{r}} = \frac{d}{\frac{r\sqrt{r}}{r}} \rightarrow d = r\sqrt{r}$$

(P) $\sin \theta_0 = \frac{n}{Ac} \rightarrow \frac{\sqrt{e}}{r} = \frac{n}{r\sqrt{e}} \rightarrow n = e$



$$(b^2 - r) \frac{\sin \hat{C}}{\sin \hat{B}} = c \xrightarrow{\textcircled{1}} (b^2 - r) \left(\frac{r}{b} \right) = cr \rightarrow \frac{b^2 - r}{b} = 1$$

$$\frac{b}{\sin B} = \frac{c}{\sin C} \rightarrow \frac{\hat{\sin C}}{\hat{\sin B}} = \frac{c}{b} \quad (1)$$

$$b^2 - b - 2 = 0$$
$$(b - 2)(b + 1) = 0$$

$b = 2$ $b = -1$

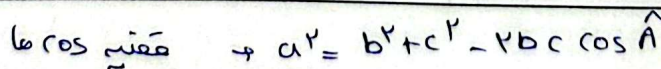
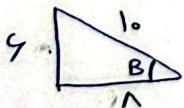
← غلط



Le coseno $\rightarrow b^r = a^r + c^r - 2ac \cos \hat{B}$

$$149 = f_{f1} + f_{o0} - r_x r_o \times \frac{1}{\mu} \times \cos B \rightarrow 4V_V = A f_o \cos B$$

$$\cos \hat{\beta} = 0,1 \rightarrow \sin_B^2 + \cos_B^2 = 1 \rightarrow \sin_B = 0,7$$



$$\cos \varphi_0 = \frac{1}{2}$$

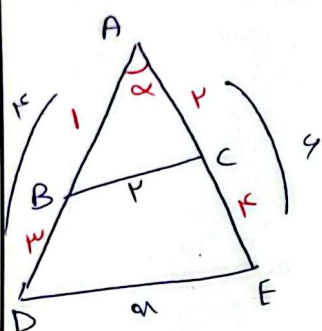
$$a^r = 14 + r(1 + \sqrt{r})^r - r \times r \times r(1 + \sqrt{r}) \times \frac{1}{r}$$

$$a^r = 14 + 14 + \cancel{A\sqrt{13}} - 1 - \cancel{A\sqrt{13}}$$

$$(a^2) a^2 = 4 \rightarrow a = 2\sqrt{2}$$

$$\text{b) } \frac{a}{\sin A} = \frac{b}{\sin B} \rightarrow \frac{\frac{\sqrt{5}}{\frac{1}{\sqrt{5}}}}{\frac{1}{\sqrt{5}}} = \frac{5}{\sin B} \rightarrow \sin B = \frac{\sqrt{5}}{5} \rightarrow \hat{B} = 27^\circ, \hat{C} = 36^\circ$$

$$\rightarrow I_{N0} - (r\omega + q_0) = V_{\downarrow}$$



ابتدا $\cos \alpha$ را در مثل ABC طبق قضیه $\cos$ محاسبه می‌کنیم

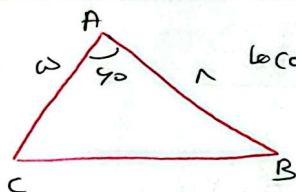
$$a^2 = b^2 + c^2 - 2bc \cos \hat{A}$$

$$1 = 1 + 1 - 2 \times 1 \times 1 \times \cos \hat{A} \Rightarrow \cos \hat{A} = \frac{1}{2}$$

$$\Delta ADE \rightarrow a^2 = x^2 + x^2 - 2 \times x \times x \times \frac{1}{2}$$

$$a^2 = 1^2 + 1^2 - 1^2 \Rightarrow a^2 = 1 \Rightarrow a = 1$$

$$DE^2 = AD^2 + AE^2 - 2AD \times AE \times \cos \alpha$$



طبق قضیه $\cos$ $BC^2 = AC^2 + AB^2 - 2AC \times AB \times \cos 60^\circ$

$$1^2 = 1^2 + 1^2 - 2 \times 1 \times 1 \times \frac{1}{2} \Rightarrow 1^2 = 1 \Rightarrow 1 = 1$$

مساحت مثل ABC

$$S_{ABC} = \frac{1}{2} b \times c \times \sin \hat{A}$$

$$S_{ABC} = \frac{1}{2} \times 1 \times 1 \times \frac{\sqrt{3}}{2} = \frac{\sqrt{3}}{4}$$

$$\frac{(b+c)^2 - a^2}{bc(\cos \hat{A} + 1)}$$

طبق قضیه $\cos$ $a^2 = b^2 + c^2 - 2bc \cos \hat{A}$

$$b^2 + c^2 + 2bc - (b^2 + c^2 - 2bc \cos \hat{A})$$

$$\frac{2bc + 2bc \cos \hat{A}}{bc(\cos \hat{A} + 1)} = \frac{2bc(1 + \cos \hat{A})}{bc(1 + \cos \hat{A})} = 2$$

$$\frac{a^2 + b^2 - c^2}{a+b-c} = a^2$$

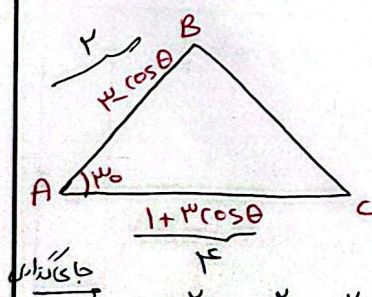
$$a^2 + b^2 - c^2 = a^2 + a^2(b-c)$$

$$\Rightarrow b^2 - c^2 = a^2(b-c) \rightarrow (b-c)(b^2 + c^2 + bc) = a^2(b-c)$$

$$a^2 = b^2 + c^2 - 2bc \cos \hat{A}$$

$$b^2 + c^2 + bc = b^2 + c^2 - 2bc \cos \hat{A}$$

$$\rightarrow \cos \hat{A} = -\frac{1}{2} \rightarrow \hat{A} = 120^\circ$$



$$S_{ABC} = \frac{AB \times AC \times \sin 120^\circ}{2} = \frac{(1 \times 1 \times \frac{\sqrt{3}}{2})}{2} = \frac{\sqrt{3}}{4}$$

$$1 + a \cos \theta - \cos \theta - 1 \cos^2 \theta = 1$$

$$\rightarrow 1 \cos^2 \theta - 1 \cos \theta + 1 = 0 \quad \cos \theta = 1$$

$$a^2 = b^2 + c^2 - 2bc \cos \hat{A} \Rightarrow a^2 = 1^2 + 1^2 - 2 \times 1 \times 1 \times \frac{\sqrt{3}}{2}$$

$$a^2 = 2 - \sqrt{3}$$