

14, 20

DATE _____

SUBJECT

2

12

$OP = OQ = \text{شعاع دایره مستوی} = r$

$$I_{\text{iso}} = 1 + 1 + \sqrt{2+5c}$$

۳- د

Q

2-ω

620

$$\frac{\sin(\frac{\pi}{4} + 12^\circ) + k \cos(\frac{\pi}{4} - 12^\circ)}{\cos(\pi - 12^\circ) + r \sin(\pi + 12^\circ)} = \frac{C_{1A} - K S_{1A}}{-C_{1A} - r S_{1A}} \xrightarrow{+C_{1A}}$$

اس سوال ۲

NOTE:

$$\frac{1 - \frac{k}{r}}{-1 - \frac{k}{r}}$$

DATE:

$$1 - \frac{k}{r} = -r - \frac{r}{r} \rightarrow -\frac{k}{r} = -\frac{r}{r} \rightarrow k = r$$

SUBJECT:

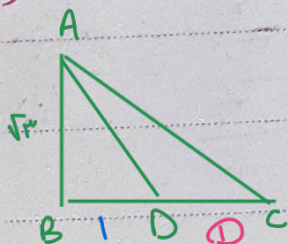
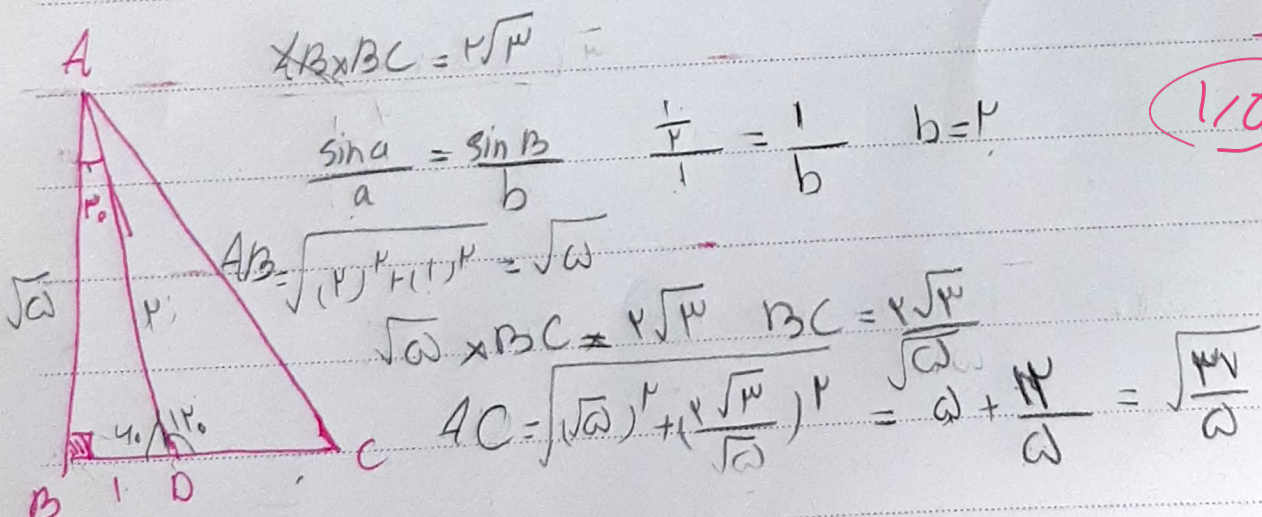
$$\frac{1 - \cos \theta}{1 + \cos \theta} = r \quad P + P \cos \theta = 1 - \cos \theta \quad P \cos \theta = -1 \cos \theta = -\frac{1}{P} \quad \sin \theta > 0 \quad -V$$

$$\frac{+ \cot \theta + \cot \theta}{+ \tan \theta - P \tan \theta} = \frac{P \cot \theta}{- \tan \theta} = -P \times \frac{\cos \theta}{\sin \theta} \times \frac{\cos \theta}{\sin \theta} = -P \left(\frac{\cos \theta}{\sin \theta} \right)^2 = -\frac{1}{P^2}$$

$$\cos^2 \theta = 1 - \sin^2 \theta \quad \sin^2 \theta = \frac{1}{P^2} \quad \checkmark$$

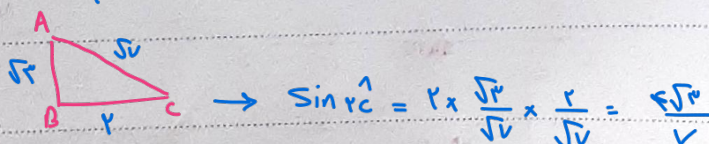
$$\frac{101}{110} = \frac{r}{P} \quad \frac{101}{110} = \frac{P H}{\omega} \frac{S_A}{S_B} = \frac{P H V_A}{P H V_B} = \left(\frac{V_A}{V_B} \right)^P$$

$$\frac{P H}{\omega} \times V_A = \frac{101}{110} \times V_B \quad \frac{V_A}{V_B} = \frac{P}{r} \left(\frac{V_A}{V_B} \right)^P = \frac{1}{P}$$



$$S_{ABC} = \sqrt{r}$$

$$\frac{AB \times BC}{r} = \frac{\sqrt{r} \times 1}{r} = \sqrt{r} \rightarrow BC < r \rightarrow r < 1$$



$$AN = AM \rightarrow AM^2 = (AB)^2 + (BM)^2 = 4 + 3 = 7 \rightarrow AM = \sqrt{7}$$

$$S_{AON} = S_{ABM} = \frac{4 \times 3}{2} = 6, \quad S_{MCN} = \frac{1 \times 1}{2}$$

$$\cancel{S_{AON}} + \cancel{S_{ABM}} + \cancel{S_{MCN}} + S_{AMN} = \cancel{S_{ABCD}} \rightarrow$$

$$\frac{1}{2} \times \sqrt{7} \times \sqrt{7} \times \sin \theta = \frac{1}{2}$$

$$\sin \theta = \frac{1}{7}$$

