

آیستارسی

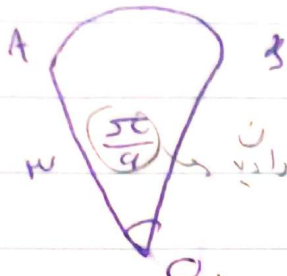
$$9 \times 54 = 486$$

$$3 \times 30 + 54 \times 0.5 = 117$$

الف

ب) لایسنس

۲. سوالات مربوط به عقده های طاعت و ساعت رانندگی



$$r^2 = \frac{h^2}{\sin^2 \theta}$$

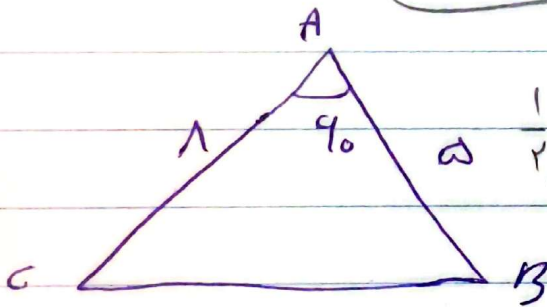
الف) ۳

$$9 \times \frac{5\pi}{9} \times \frac{1}{2} = \frac{9 \times 5\pi}{12} = \frac{3 \times 5\pi}{4}$$

$$9 + \frac{5\pi}{9} \times \frac{1}{2} = \frac{9 + \frac{5\pi}{9}}{2}$$

$$2r + \alpha r = \text{مساحت}$$

ع

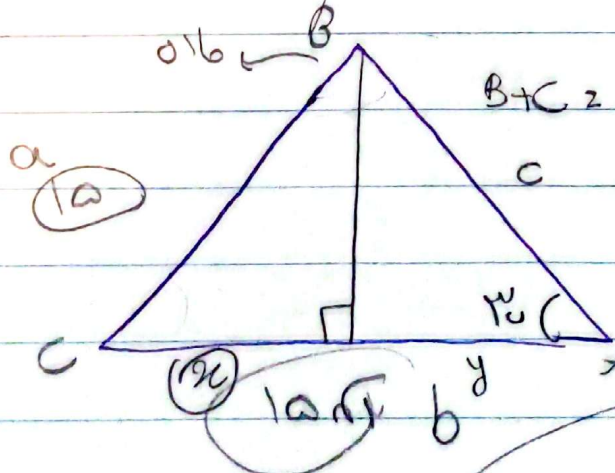


الف) مساحت ABC

$$\frac{1}{2} ab \sin 90^\circ = \frac{1}{2} \times \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} \times 1 = \frac{1}{4}$$

ب) ۱

$$BC^2 = a^2 + b^2 - 2ab \cos 90^\circ = 1 + 1 - 0 = 2 \Rightarrow BC = \sqrt{2}$$



$$B + C = 150$$

ب) و C به رادیان؟

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C} \Rightarrow \frac{1}{\sin 110} = \frac{b}{\sin 15} \Rightarrow b = \frac{\sin 15}{\sin 110}$$

$$\frac{c}{\sin C} = \frac{1}{\sin 110} \Rightarrow c = \frac{\sin 55}{\sin 110}$$

$$110 - 15 = 95$$

$$105$$

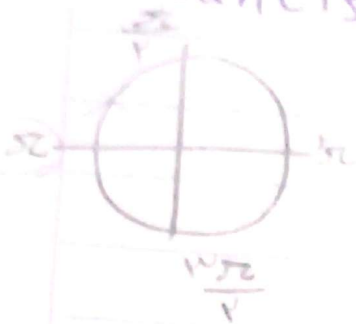
SABA NOTBOOK

مساحت سیر

$$\tan(\pi - a) + \tan(\pi + a)$$

9

$$\tan(\pi - a) - \tan(\pi + a)$$



$$\frac{-\tan a + \tan a}{-\tan a - \tan a} = \frac{0}{-2\tan a} = 0$$

$$A = \frac{\tan \alpha + \tan \beta}{1 - \tan \alpha \tan \beta}, \quad \tan \frac{\pi}{4} = 1$$

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$$

$$A = 1 \quad ? \quad A = ?$$

$$\frac{\sin \alpha + \cos \alpha}{\sin \alpha - \cos \alpha} + \frac{\sin \alpha - \cos \alpha}{\sin \alpha + \cos \alpha} = 2$$

11

$$\tan \alpha = \frac{\sin \alpha}{\cos \alpha}$$

$$\frac{(1+\tan \alpha)^2 + (1-\tan \alpha)^2}{\tan^2 \alpha - 1} = 2 \rightarrow \tan^2 \alpha = 1$$

$$\frac{\sin^2 \alpha - \cos^2 \alpha + 1}{\sin^2 \alpha + \cos^2 \alpha - 1} = \frac{\cos^2 \alpha - 1}{\sin^2 \alpha} \Rightarrow \tan^2 \alpha = 1$$

9

$$\cos(\pi - \alpha) \rightarrow \frac{\sqrt{1+\tan^2 \alpha}}{\tan \alpha}$$

$$\sin(\pi - \alpha)$$

$$\frac{\sqrt{1+\tan^2 \alpha}}{\tan \alpha}$$

$$\frac{\sqrt{1+\tan^2 \alpha}}{\tan \alpha}$$

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