

نام و نام خانوادگی کلاس پاسخنامه تشریحی تکلیف شماره ۱/۱ A

الف) $\tan \frac{11\pi}{6} + \sin \frac{10\pi}{6} \cos \frac{13\pi}{6} = \tan \left(\frac{11\pi}{6} \right) + \sin \frac{5\pi}{6} \cos \frac{5\pi}{6}$
 $= -1 + \left(-\frac{\sqrt{3}}{2} \times -\frac{\sqrt{3}}{2} \right)$
 $= -1 + \frac{3}{4} = -\frac{1}{4}$
 $\tan \frac{11\pi}{6} \sin \frac{11\pi}{6} + \cos \frac{10\pi}{6}$
 $\tan \frac{5\pi}{6} \times \sin \frac{5\pi}{6} + \cos \frac{4\pi}{6} = \frac{-1}{\sqrt{3}} \times \frac{\sqrt{3}}{2} + \left(-\frac{1}{2} \right) = 0$

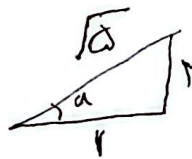
$$\frac{12 \sin - \sin}{8 \sin + \sin} = \frac{11 \sin}{9 \sin} = \frac{11}{9}$$

پاسخ

$$\frac{\cos}{\sin} = c \Rightarrow \cos = c \sin$$

۲

$\cos = \frac{\text{جانب مجاور}}{\text{وتر}} = \frac{1}{\sqrt{5}}$
 $\tan = \frac{\sin}{\cos} = 2$
 $-\frac{1}{\sqrt{5}}$ چون در این صورت است



۳

الف) $\cos \left(\frac{11\pi}{6} + a \right) = \cos \left(\frac{13\pi}{6} + a \right) = \frac{\sqrt{2}}{10} = \cos a = \frac{\sqrt{91}}{10}$
 $\cos \frac{13\pi}{6} = \frac{\sqrt{2}}{10}$
 $\sin \left(\frac{13\pi}{6} + a \right) = \sin \left(\frac{5\pi}{6} + a \right) = \frac{\sqrt{2}}{10}$
 $\sin \frac{5\pi}{6} = \frac{\sqrt{2}}{10}$
 $\cos a = \frac{\sqrt{2}}{10}$
 $\sin a = \frac{\sqrt{2}}{10}$
 $\tan a = \frac{\sin a}{\cos a} = 1$
 $a = 45^\circ$

۴

$$\tan^2 = \frac{\sin^2}{\cos^2} = \frac{1}{2} = \frac{1}{2}$$

$$\sin^2 + \cos^2 = 1$$

$$2 \sin^2 + \cos^2 = \frac{5}{3}$$

$$\sin^2 = \frac{1}{3}$$

$$\sin = \frac{1}{\sqrt{3}}$$

$$\cos^2 = \frac{2}{3}$$

$$\cos = \frac{\sqrt{2}}{\sqrt{3}}$$

۵

$$S = \frac{1}{r} \times a \times b \times \sin a = \frac{1}{r} \times r \times \sqrt{r} \times \sin a = \epsilon / a$$

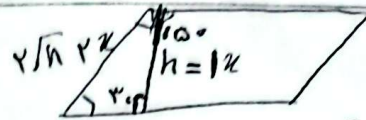
$$a_{\max} = \frac{r\pi}{r}$$

$$a_{\min} = \frac{\pi}{r}$$

$$\frac{r\pi}{r} = \pi$$

$$r\sqrt{r} \times \sin a = \epsilon / a$$

$$\sin a = \frac{\epsilon / a}{r\sqrt{r}} = \frac{1/a}{\sqrt{r}} = \frac{\sqrt{r}}{r}$$



$$r\sqrt{1} + r\sqrt{1} + r\sqrt{1} + r\sqrt{1} = 10\sqrt{1}$$

$$r\sqrt{1}$$

$$r \times r \times r = \omega \epsilon$$

$$r \times r = \omega \epsilon$$

$$r = \frac{\omega \epsilon}{r}$$

$$r = \sqrt{1}$$



$$S_{ABC} = \frac{1}{r} \times \omega \times V \times \sin a = \frac{\omega \omega}{r} \sin a$$

$$S_{APE} = \frac{1}{r} \times r \times V \times \sin a = \omega \sin a$$

$$\frac{\omega \sin a}{r} - \frac{\omega \sin a}{r} = \frac{V \sin a}{r}$$

$$\frac{V \sin a}{r} = \frac{V}{r} \Rightarrow \sin a = \frac{1}{r}$$

$$a = \pi_0$$

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$$\tan \frac{\pi}{9} = \frac{1}{\sqrt{r}} = \frac{\sqrt{r}}{r}$$

$$BM = r \times AB \Rightarrow AM = (1-r)AB$$

$$BN:BC = r$$

$$BM:AB = r$$

$$S_{BMA}$$

$$\frac{S_{BMA}}{S_{ABC}} = r \times \frac{BN}{BC} = r \times \frac{r}{r}$$

$$r \times \frac{r}{a} = \frac{1}{r} \Rightarrow r = \frac{a}{9}$$

$$BM = r \times AB = \frac{a}{9} AB$$

$$AM = (1-r)AB = \frac{8}{9} AB$$

$$\frac{BM}{AM} = \frac{\frac{a}{9}}{\frac{8}{9}} = \frac{a}{8}$$

$$\frac{1}{\cos} = \frac{|\sin|}{\cos}$$

$$\frac{-\sin}{\cos} = \frac{|\sin|}{\cos}$$

$$-\sin = |\sin|$$

$$\sin \leq 0$$

$$\frac{\sin + 1}{|\cos|} = \frac{1}{\cos}$$

$$\frac{1}{\cos} - \tan$$

$$\frac{1}{|\cos|} - \tan = \frac{1 + \sin}{|\cos|}$$

$$\frac{1}{|\cos|} = \frac{1 + \sin}{|\cos|} + \tan$$

$$1 = 1 + \sin + \cos \times \tan$$

$$1 = 1 + \sin + \cos \times \frac{\sin}{\cos}$$

$$1 = 1 + \sin + \frac{\cos}{\cos} \times \sin$$

$$\cos \times \frac{\sin}{\cos} = \sin$$

$$1 + \sin = 1 + \sin + \cos$$

$$1 + \sin = 1 + \sin + \cos$$