سانیا هادی

Subject
Year: Month: Date:
NOTE BOOK

۱۸

(1) $h=\frac{1}{۲}a$ $S=۵۴$

$a=\frac{۲}{۳}b$ $\frac{a}{b}=\frac{۲}{۳}$

$h=\frac{1}{۲}\times\frac{۲}{۳}b=\frac{1}{۳}b$

$۵۴=\frac{1}{۲}b^۲ \longrightarrow ۵۴\times۳=b^۲$

$b^۲=۱۶۲$ ۱۶۲ | ۲ ، ۸۱

$(۶\sqrt{۲}+۹\sqrt{۲})=۱۵\sqrt{۲} \longrightarrow ۱۵\sqrt{۲}\times۲=۳۰\sqrt{۲}$

۵

(2) ۰

$a=\frac{۲}{۳}\times۹\sqrt{۲}$

$\Rightarrow a=۶\sqrt{۲}$

$b=۹\sqrt{۲}$

$S_{ABC}=\frac{1}{۲}\times۵\times۷\times\sin\hat{A}$

$S_{ADE}=\frac{1}{۲}\times۴\times۷\times\sin\hat{A}$

$\Delta S=\frac{1}{۲}\times۷\times\sin\hat{A}=۱,۷۵$

$\sin\hat{A}=\frac{1}{۲} \rightarrow \tan\hat{A}=\frac{\sqrt{۳}}{۳}$

(3) $\frac{1}{|\cos\alpha|}-\frac{-\sin\alpha}{\cos\alpha}=\frac{1+\sin\alpha}{|\cos\alpha|} \Rightarrow$ $|\cos\alpha|=-\cos\alpha$

$|\cos\alpha|=-\cos\alpha$

جواب ← ناحیه سوم / اثر ان

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

ناحیه سوم / چهارم

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

Baharan

سارینا جابری

Subject

Year: Month: Date:

NOTE BOOK

④ $\tan(\pi-\alpha)=\frac{1.5}{2} \Rightarrow \tan\alpha=-\frac{3}{4}$

$\tan(\frac{\pi}{2}-\alpha)=\cot\alpha$

$\tan(\frac{\pi}{2}-\alpha)=\cot\alpha=\frac{1}{\tan\alpha}=\frac{1}{-\frac{3}{4}}=-\frac{4}{3}$

⑤ $\frac{3\cos(248)-2\sin(158)}{\sin(202^\circ)-\cos(292^\circ)}=\frac{3\cos(270-22)-2\sin(180-22)}{\sin(180+22)-\cos(270+22)}$

$=\frac{-3\sin22-2\sin22}{-\sin22-\sin22}=\frac{-5\sin22}{-2\sin22}=\frac{5}{2}=2.5$

⑥ $\cos\alpha=\frac{2}{3} \Rightarrow \begin{cases}\sin\alpha=-\frac{\sqrt{5}}{3}\\ \tan\alpha=-\frac{\sqrt{5}}{2}\end{cases}$

$\frac{\cos\alpha+\sin\alpha}{|\tan^2(\alpha)-1|}=\frac{\frac{2}{3}+(-\frac{\sqrt{5}}{3})}{|\frac{5}{4}-1|}=\frac{\frac{2-\sqrt{5}}{3}}{\frac{1}{4}}$

$=\frac{4(2-\sqrt{5})}{3}$

⑦ $\sin\alpha=2\cos\alpha \qquad \sin^2\alpha+\cos^2\alpha=1$

$4\cos^2\alpha+\cos^2\alpha=1$

$5\cos^2\alpha=1$

$\cos^2\alpha=\frac{1}{5} \Rightarrow \cos\alpha=-\frac{\sqrt{5}}{5}$

Baharan

(A) $y = \frac{-2m}{m^2-1}x + 2$ $\tan\theta = \sqrt{3}$

Subject

Year: Month: Date: NOTE BOOK

$-\frac{2m}{m^2-1} = \sqrt{3}$

$\sqrt{3}m^2 + 2m - \sqrt{3} = 0$

$\frac{-2 \pm 4}{2\sqrt{3}} \rightarrow \frac{\sqrt{3}}{3}$

$\frac{\sqrt{3}}{3} + \sqrt{3} = \frac{4\sqrt{3}}{3}$ $\frac{\sqrt{3}}{3}$

(1) $\tan\left(\frac{\pi}{4} - \left(-\frac{\pi}{4}\right)\right) = \tan\left(\frac{\pi}{2}\right)$ ⇒ تعریف نشده

$\tan\left(\frac{\pi}{4} - \frac{\pi}{4}\right) = \tan 0 = 0$

$m = -2$

$m \neq -2$

(2) $-2(m+1)$

Scanned with CamScanner

Subject

Year: Month: Date: NOTE BOOK

(10) $\tan(300^\circ)\cos(210^\circ)+\tan(135^\circ)\sin(135^\circ)$

$= (-\sqrt{3})\left(-\frac{\sqrt{3}}{2}\right)+(-\sqrt{3})\left(\frac{\sqrt{3}}{2}\right)$

$= \frac{3}{2}-\frac{3}{2} = 0$