سایا صادری

Subject
Year: Month: Date: NOTE BOOK

(1) $h = \frac{1}{2}a$ $S = 64$

$a = \frac{2}{3}b$ $\frac{a}{b} = \frac{2}{3}$

$h = \frac{1}{2} \times \frac{2}{3} b = \frac{1}{3} b$

$S = \frac{1}{2} b^2 \longrightarrow 64 \times 2 = b^2$

$b^2 = 144$ $144 \angle 2$

$(4\sqrt{2} + a\sqrt{2}) \times 10\sqrt{2} \longrightarrow 10\sqrt{2} \times a^2 = 30\sqrt{2}$

(2)

$a = \frac{2}{3} \times 9\sqrt{2}$

$\Rightarrow \boxed{a = 6\sqrt{2}}$

$b = 9\sqrt{2}$

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

$|\cos\alpha| \leq \cos\alpha$ ← جواب

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

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

ناحیه اول و چهارم

ناحیه سوم

سایا جاوری

Subject
Year: Month: Date:
NOTE BOOK

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

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

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

⑤ $\frac{3\cos(2\times 180)-2\sin(150)}{\sin(210)-\cos(240)}=\frac{3\cos(360-30)-2\sin(180-30)}{\sin(180+30)-\cos(270-30)}$

$=\frac{-3\sin 30-2\sin 30}{-\sin 30-\sin 30}=\frac{-5\sin 30}{-2\sin 30}=\frac{5}{2}=2.5$

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

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

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

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

$5\cos^2\alpha=1$

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

Baharan

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

Subject

Year: Month: Date: NOTE BOOK

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

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

$\frac{-2+4}{2\sqrt{3}} = \frac{\sqrt{3}}{3}$

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

(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

(2) $-2 < m < 1$

Subject

Year: Month: Date:

NOTE BOOK

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

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

$= \frac{3}{2}-\frac{\sqrt{6}}{2}$