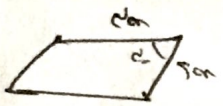
نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ۱۴ کلاس ..... B .....

۱



$۲\tan\alpha + ۲\tan\alpha + \sin ۱۲۰^\circ = ۵$ $\quad \tan^۲\alpha = ۵$ $\quad \tan\alpha = \sqrt{۱۸}$

$۲(۲\tan\alpha + ۲\tan\alpha) = ۱۰\tan\alpha \quad ۱۰\sqrt{۱۸}$

۳ سوال

$\frac{-۱}{|\cos\alpha|} - \frac{\sin\alpha}{\cos\alpha} = \frac{-۱-\sin\alpha}{|\cos\alpha|}$

$\cos\alpha < ۰$ $\quad \sin\alpha < ۰$

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

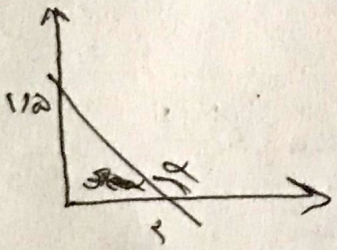
۴ سوال (۲)

$-\frac{۱}{۲} \times ۶ \times ۷ \times \sin\alpha + \frac{۱}{۲} \times ۵ \times ۷ \times \sin\alpha = ۱۷۵ \quad ۱۷۵\sin\alpha - ۱۴۵\sin\alpha = ۱۷۵$

$۳۵\sin\alpha = ۱۷۵ \quad \sin\alpha = \frac{۱}{۲}$

$\tan(۳۰^\circ) = \frac{\sqrt{۳}}{۳}$

۴



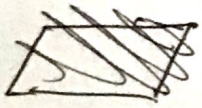
$\tan\left(\frac{\pi}{۲} - \alpha\right) = \cot\alpha$

$\tan\alpha = \frac{-۷۵}{۲} \quad \cot = \frac{-۲}{۱۱۵}$

۵

$$\frac{+۲\cos(۲۴۸) - ۲\sin(۱۵۸)}{\sin(۲۰۲) - \cos(۲۹۲)}$$

۶



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

$\sin = \frac{\sqrt{5}}{3}$

$\tan = \frac{\sqrt{5}}{2}$

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

$$\frac{\frac{2}{3} \to -\frac{\sqrt{5}}{3}}{\frac{4}{5}-1} = \frac{\frac{2-\sqrt{5}}{3}}{\frac{1}{5}} = \frac{1-2\sqrt{5}}{3}$$

۷

$\sin^2 + \cos^2 \longrightarrow \cos^2 = 1$ $\quad \cos = \ominus\frac{\sqrt{5}}{3}$

۸

$$\frac{-2m}{m^2-1} = \frac{1}{\sqrt{2}} \qquad m^2 - 1 + 2\sqrt{2}m = 0 \qquad \alpha x^2 - \alpha x + \alpha = \frac{\sqrt{\Delta}}{a}$$

$$\Delta = 8 + 4 = 12 \qquad \frac{2\sqrt{3}}{1} = 2\sqrt{3} = m_2 - m_1$$

۹

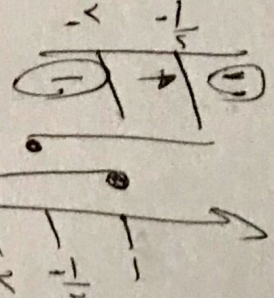
$$\frac{-\pi}{4} < \alpha < \frac{3\pi}{4} \qquad 0 < \frac{\pi}{4} - \alpha < \frac{3\pi}{4} \qquad 0 < \tan\left(\frac{\pi}{4} - \alpha\right) < 1$$

$$\frac{1-2m}{2+m} < 1$$

$$\frac{1-m}{2+m} > 0$$

$$\frac{-2 \quad 1}{-|(+)|-}$$

$$\frac{-1-2m}{2+m} \quad -2 < m < -\frac{1}{2}$$



$$\left[-\frac{1}{2}, 1\right[$$

۱۰

$$(-\tan(\pi_0))\left(-\cos(\pi_0)\right) + (-\tan(\pi_0))(\sin(\pi_0))$$

$$\frac{\sin(\pi_0)\cdot\cos(\pi_2)}{\cos(\pi_2)} - \frac{\sin(\pi_0)}{\cos(\pi_0)}$$

$$\frac{\sqrt{2}-1}{2\sqrt{2}}$$

$$\frac{\sin^2\pi\left(-\sin_{(\pi_0)}\cdot\cos_{(\pi_0)}\right)}{\cos(\pi_0)}$$