ریسا رضوانی راد یازدهم پسر B

۱- $\frac{1}{2}\times 12\times x\times \sin 30 = 60 \Rightarrow x = 10 \to 12$ یا 8

$(12+8)\times 2 = 40$

۲- $\frac{K}{\epsilon} = \frac{1}{2}\sin A(2\alpha - 2A) \Rightarrow \sin A = \frac{1}{2}$

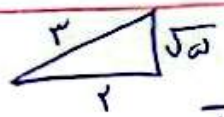
$\Rightarrow A = \frac{\pi}{6} \Rightarrow \tan\frac{\pi}{6} = \frac{\sqrt{3}}{3}$

۳- $-\frac{1}{\cot} = -\tan = \frac{|\sin|}{\cos} \Rightarrow \sin < 0$ $\quad \frac{1}{|\cos|} - \tan = \frac{1}{|\cos|} + \frac{\sin}{|\cos|} \Rightarrow \cos < 0$ ناحیه ۳

۴- $m = \frac{-12}{5} \Rightarrow \left|\frac{-3}{4}\right| = |\tan(\pi-\alpha)| = +\tan\alpha \Rightarrow \tan\alpha = \frac{3}{4}$ $\quad \tan(\frac{\pi}{2}-\alpha) = \cot\alpha = \frac{4}{3}$

۵- $\frac{3\cos(\frac{3\pi}{2}-22) - 2\sin(\pi-22)}{\sin(\pi+22) - \cos(\frac{3\pi}{2}+22)} = \frac{-3\sin 22^\circ - 2\sin 22^\circ}{-\sin 22 - \sin 22} = 2/5$

۶- $\frac{\cos\alpha + \sin\alpha}{|\tan^2\alpha - 1|}$ $\quad \cos = \frac{2}{3}$ $\quad \tan = -\frac{\sqrt{5}}{2}$ $\quad \sin = -\frac{\sqrt{5}}{3}$



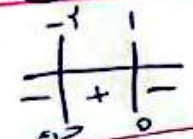
$\frac{2-\sqrt{5}}{2\times\frac{1}{4}} = \frac{4-4\sqrt{5}}{2}$

۷- $\cos^2 + 4\cos^2 = 1 \Rightarrow \cos^2 = \frac{1}{5}$

$\Rightarrow \cos = \pm\frac{\sqrt{5}}{5} \Rightarrow -\frac{\sqrt{5}}{5}$

۸- $\tan\frac{\pi}{6} = \sqrt{3} = \frac{-2m}{m^2-1} \Rightarrow \sqrt{3}m^2 + 2m - \sqrt{3} = 0$

$\frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{16+12}}{\sqrt{3}} = \frac{4}{\sqrt{3}}$

۹- $m \in (-2, 1) \Leftarrow$ 

$\frac{1-m}{2+m} > 0$ $\quad \Leftarrow 0 < \frac{\pi}{6}x < \frac{\pi}{2}$

۱۰- $-\sqrt{2}\times\frac{-\sqrt{2}}{2} + -\sqrt{2}\times\frac{\sqrt{3}}{2} = 0$