

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۱۷ کلاس: ۱۲/۱۵

پاسخنامه صحیح است

۱۵/۱۵

$$\Lambda \cos \alpha = 1 + \tan^2 \alpha = \frac{\cos^2 \alpha + \sin^2 \alpha}{\cos^2 \alpha} \rightarrow \cos \alpha = \frac{1}{\Lambda} \rightarrow \cos \alpha = \frac{1}{4}$$

$$\alpha = 2k\pi + \frac{\pi}{4}$$

$$\alpha = 2k\pi - \frac{\pi}{4}$$

✓

$$C \cdot S^2 \frac{\pi}{4} = \frac{1 + C \cdot S^2 \pi}{2} \rightarrow 2 \sin^2 \pi + 2(C \cdot S^2 \frac{\pi}{4} - 1) = -2$$

$$2 \sin^2 \pi + C \cdot S^2 \frac{\pi}{4} = 0 \quad \text{مجموع دو عبارت ناتمام برابر صفر است معادلات صفر است}$$

$$2 \sin^2 \pi = 0 \rightarrow \pi = (0, \pi)$$

$$C \cdot S^2 \frac{\pi}{4} = 0 \rightarrow \pi = -\frac{\pi}{4}, \frac{\pi}{4}, \frac{3\pi}{4}, -\frac{3\pi}{4}$$

۲ جواب

$$\sin \alpha (1 - \sin^2 \alpha) = 1$$

$$\sin \alpha (1 - \sin^2 \alpha) = 1$$

$$\sin \alpha (1 - \sin^2 \alpha) + \sin \alpha = 1$$

$$- \sin^3 \alpha + \sin \alpha = 1 \rightarrow \sin^3 \alpha = 1 \rightarrow \alpha = \frac{2k\pi}{3} + \frac{\pi}{4}$$

$$\alpha = \frac{\pi}{4} + \frac{2k\pi}{3} + \frac{\pi}{4} = \frac{5\pi}{4}$$

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$$\frac{1}{\sin(\pi/4 + \pi)} + \frac{1}{\cos(\pi/4 + \pi)} = 0 \rightarrow \frac{1}{\cos \pi} + \frac{1}{\sin \pi} = 0$$

$$\cos \pi = \sin \pi \quad \sin \pi \cos \pi \rightarrow \sin^2 \pi = 1/4 \rightarrow \pi = 2k\pi + \pi/4 \quad \pi = k\pi + \pi/4$$

$$C \cdot S^2 \pi = 0$$

$$\sin^2 \pi = 1/4$$

$$\pi = 2k\pi + \pi/4 \quad \pi = k\pi + \pi/4$$

$$\cos(\pi + \pi/4) = \frac{1}{\sqrt{2}} \rightarrow \cos(\pi + \pi/4) = -\sin \pi/4 = 1/4 \quad -1/4 = -1/4$$

$$\sin(\pi + \pi/4) = \frac{1}{\sqrt{2}}$$

$$C \cdot S^2 \pi - \sin \pi = \frac{\sqrt{4}}{4}$$

$$\sin^2 \pi = 1/4$$

$$m \frac{1 - \sqrt{2}}{\sqrt{2}} = \sqrt{4} + \sqrt{4} + \sqrt{4} \rightarrow 4\sqrt{2} = m(1 - \sqrt{2}) \rightarrow m = \frac{4\sqrt{2}}{1 - \sqrt{2}}$$

$$m \times \frac{\sqrt{4}}{4} - 3\sqrt{4} \times \frac{1}{4} = \sqrt{4}$$

$$m = 4$$

$$\cos(\pi/2 - \pi/4) \cos(\pi/4) = 1$$

$$\cos(\pi/2 - \pi/4) = \cos(\pi/4 - \pi/2) \rightarrow \sin(\pi/2 + \pi/4) = 1$$

$$\sin(\pi/2 + \pi/4) = \pm 1$$

$$\pi/2 + \pi/4 = k\pi + \pi/4 \rightarrow \pi/2 = k\pi$$

$$\pi/2 = \frac{k\pi}{2}$$

$$\sin \pi + \sqrt{r} \cos \pi = \sqrt{r} \rightarrow 1 + \sqrt{r} \cos \pi = \sqrt{r}$$

$$\sin(\pi + \pi/4) = \frac{\sqrt{r}}{r}$$

$$\pi + \pi/4 = 2k\pi + \pi/4$$

عبرت دیا ضربی لیتے

$$\rightarrow \frac{\sqrt{r} - \sin \pi}{\sin \pi} = \frac{\sqrt{r} \cos \pi}{\sin \pi} \rightarrow \sqrt{r} - \sin \pi = \sqrt{r} \cos \pi$$

$$\rightarrow r + \sin^2 \pi - \sqrt{r} \sin \pi = r \cos^2 \pi$$

$$r \sin \pi \sin(\pi/2 - \pi/4) = 1 \rightarrow \cos \pi \sin \pi = -\frac{1}{r}$$

$$\frac{1}{r} \sin \pi = -\frac{1}{r} \cos(\pi/4)$$

$$\sin \pi = -\frac{1}{r} \rightarrow r \pi - \frac{\pi}{4} = \pi$$

$$\pi = k\pi - \frac{\pi}{4} \rightarrow \pi = k\pi - \frac{\pi}{4}$$

$$\pi = \frac{11\pi}{12}, \frac{19\pi}{12}, \frac{25\pi}{12}, \frac{35\pi}{12}$$

$$r \pi + \frac{\pi}{4} = \pi \rightarrow k\pi + \frac{\pi}{4} = \pi$$

$$\text{مجملہ} = 4\pi$$

$$? \text{ sub}$$

$$1 + C \cdot S^2 \alpha = r \cdot S^2 \alpha \rightarrow C \cdot S \alpha \cdot C \cdot S \alpha \cdot C \cdot S \alpha = \pm \frac{1}{r}$$

$$1 + C \cdot S^2 \alpha = r \cdot S^2 \alpha$$

$$1 + C \cdot S \alpha = r \cdot S^2 \alpha$$

$$\alpha = r \pi + \pi$$

$$\alpha = r \pi - \pi$$

$$\text{mam A} = \frac{\pi}{4}$$

$$\tan^2 \pi = \frac{1}{\tan \pi} = C \cdot \tan = \tan(\frac{\pi}{4} - \pi)$$

$$r \pi = k\pi + \frac{\pi}{4} - \pi \rightarrow \pi = \frac{k\pi}{r} + \frac{\pi}{4}$$