

۲۰ عالی نوشتی!

الف) $\frac{27}{180} = \frac{Real}{\pi} = \frac{r}{r_0} \rightarrow Real = \left[\frac{27\pi}{20} \right] \checkmark$

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ب) $125 \times \frac{\pi}{180} = \left[\frac{25\pi}{36} \right] \checkmark$

ج) $\frac{5\pi}{12} \times \frac{180}{\pi} = \left[75^\circ \right] \checkmark$

د) $\frac{4\pi}{3} \times \frac{180}{\pi} = \left[240^\circ \right] \checkmark$

۱: $10a^\circ$
 ۲: $\frac{125a}{9} = \frac{D}{180} \rightarrow D = \frac{125 \times 180 \times a}{9} = 1250a$
 ۳: $\frac{a\pi}{\pi} = \frac{D}{180} \rightarrow D = 180a$
 $\left. \begin{array}{l} D = 1250a \\ D = 180a \end{array} \right\} \rightarrow \begin{array}{l} 1250a = 180a \\ a = \{ \end{array} \checkmark$

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الف) $\left(\frac{1}{r} \times \frac{\sqrt{e}}{r} \right) - \left(\frac{\sqrt{e}}{r} \times \frac{1}{r} \right) - 1 + 2 = \left[1 \right] \checkmark$

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ب) $\frac{\left(\frac{\sqrt{e}}{r} \right)^2 + (1)^2 + (\sqrt{e})^2}{\sqrt{e} - \frac{\sqrt{e}}{r}} = \frac{\frac{e}{r^2} + 1 + e}{\frac{r\sqrt{e}}{r} - \frac{\sqrt{e}}{r}} = \frac{\frac{12}{r^2} + 1 + 12}{\frac{r\sqrt{e}}{r} - \frac{\sqrt{e}}{r}} = \frac{12}{r\sqrt{e}} \times \frac{12}{r\sqrt{e}} = \left[\frac{144}{r^2 e} \right] \checkmark$

$\left(-\frac{1}{r} \times \frac{1}{r} \right) + \left(\frac{\sqrt{e}}{r} \times \frac{\sqrt{e}}{r} \right) = \sin^2 \theta$

$-\frac{1}{e} + \frac{e}{e} = \frac{r}{e} = \sin^2 \theta \rightarrow \sin \theta = \frac{\sqrt{r}}{e}$

از همداد است $\cos \theta = \frac{\sqrt{r}}{r} \rightarrow \tan \theta = 1 \checkmark$

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$\frac{r \times \frac{\sqrt{e}}{r} \times \left(1 - \frac{1}{r} \right)}{\left(1 - \frac{1}{e} \right)^2} = \frac{\frac{4\sqrt{e}}{9}}{\frac{4}{9}} = \sqrt{e} = \tan \theta$

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$\theta = \left[\frac{\pi}{4} \right] \checkmark$

