

الف) $20^\circ \rightarrow \frac{20 \times \pi}{180} = \frac{\pi}{9}$
 ب) $125 \rightarrow \frac{125 \times \pi}{180} = \frac{25\pi}{36}$
 ج) $\frac{5\pi}{12} \text{ rad} \rightarrow \frac{5\pi}{12} \times \frac{180}{\pi} = 75^\circ$
 د) $\frac{8\pi}{9} \text{ rad} \rightarrow \frac{8\pi}{9} \times \frac{180}{\pi} = 160^\circ$

$\frac{125a}{9} \times \frac{9}{180} = 12,5a^\circ$ $\frac{5\pi}{12} \times \frac{180}{\pi} = 75^\circ$
 $10a + 12,5a + 12,5a = 110$
 $35a = 110$ $a = 3,14^\circ$

$\left(\frac{1}{r} \times \frac{\sqrt{3}}{r}\right) - \left(\frac{\sqrt{3}}{r} \times \frac{1}{r}\right) = 1 + 2 \times 1 = -1 + 2 = 1$

$\frac{\frac{3}{9} + 1 + 2}{\sqrt{3} - \frac{\sqrt{3}}{3}} = \frac{\frac{13}{3}}{\frac{2\sqrt{3}}{3}} = \frac{13}{2\sqrt{3}} = \frac{13\sqrt{3}}{6}$

$-\frac{1}{r} \times \frac{1}{r} + \frac{\sqrt{3}}{r} \times \frac{\sqrt{3}}{r} = \sin^2 \theta$
 $-\frac{1}{r} + \frac{3}{r} = \frac{2}{r} = \frac{1}{r} = \sin^2 \theta$

$\sin \theta = \frac{\sqrt{3}}{2}$ $\theta = 60^\circ$

$\tan \theta = 1$

$\frac{\frac{3}{9} \times \frac{\sqrt{3}}{3} \left(\frac{3}{3}\right)}{\left(\frac{3}{3}\right)^2} = \sqrt{3} = \tan \theta \rightarrow \theta = \frac{\pi}{3} \text{ rad}$

