

$$+ \frac{1}{2}$$

$$\tan\left(\frac{5\pi}{4}\right) + \sin\left(\frac{5\pi}{4}\right) = \tan\left(\frac{5\pi}{4}\right) + \sin\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}} - \frac{1}{\sqrt{2}} = -\frac{2}{\sqrt{2}} = -\sqrt{2}$$

$$\tan\left(\frac{5\pi}{4}\right) + \sin\left(\frac{5\pi}{4}\right) = \tan\left(\frac{5\pi}{4}\right) + \sin\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}} - \frac{1}{\sqrt{2}} = -\frac{2}{\sqrt{2}} = -\sqrt{2}$$

$$\frac{1}{2} - \frac{1}{2} \cos\left(\frac{5\pi}{4}\right)$$

$$\frac{1}{\sin\left(\frac{5\pi}{4}\right)} = \frac{1}{\cos\left(\frac{5\pi}{4}\right)} = \frac{1}{-\frac{1}{\sqrt{2}}} = -\sqrt{2}$$

$$\sin\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}}$$

$$\cos\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}}$$

$$\frac{1}{\cos\left(\frac{5\pi}{4}\right)} = \frac{1}{-\frac{1}{\sqrt{2}}} = -\sqrt{2}$$

$$\cos\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}} \quad \sin\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}}$$

$$\frac{1}{\cos\left(\frac{5\pi}{4}\right)} = \frac{1}{-\frac{1}{\sqrt{2}}} = -\sqrt{2}$$

$$\cos\left(\frac{5\pi}{4}\right) = -\frac{1}{\sqrt{2}}$$

$$\frac{1}{\cos\left(\frac{5\pi}{4}\right)} = \frac{1}{-\frac{1}{\sqrt{2}}} = -\sqrt{2}$$

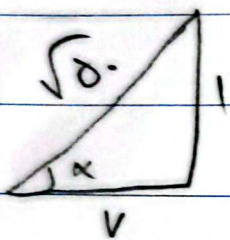
$$\sin\left(\frac{15\pi}{8} + a\right) = \sin\left(\frac{15\pi}{8}\right) \cos a + \sin a \cos\left(\frac{15\pi}{8}\right) = \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{2}$$

$$\sin\left(\frac{15\pi}{8}\right) = \sin\left(2\pi + \frac{7\pi}{8}\right) = -\frac{\sqrt{2}}{2}$$

$$\cos\left(\frac{15\pi}{8}\right) = -\frac{\sqrt{2}}{2}$$

$$\cos a = \tan^2 a + 1 \Rightarrow \frac{1}{\cos a} = \frac{1}{\frac{1}{2}} + 1 = \frac{1}{\cos a} \Rightarrow \cos a = \frac{1}{\sqrt{2}}$$

$$\sin a = \frac{1}{\sqrt{2}} \Rightarrow \sin^2 a = \frac{1}{2} \Rightarrow \sin a = \frac{1}{\sqrt{2}}$$



$$\sin \alpha = \frac{1}{\sqrt{2}} \quad \cos \alpha = \frac{1}{\sqrt{2}}$$

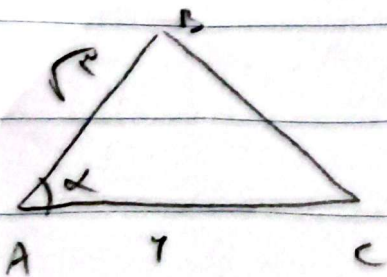
$$\sin^2 \alpha + \cos^2 \alpha = \frac{1}{2} + \frac{1}{2} = 1$$

$$\sin^2 \alpha + \cos^2 \alpha = 1$$

$$\sin \alpha = \frac{1}{\sqrt{2}}$$

$$\cot^2 \alpha + 1 = \frac{1}{\sin^2 \alpha} = 2 \Rightarrow \cot^2 \alpha = 1$$

$$\cot \alpha = 1 \Rightarrow \tan \alpha = 1$$

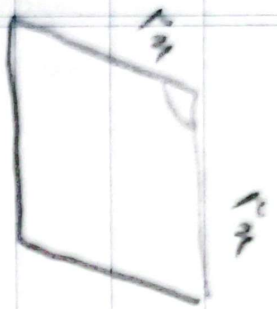


$$\sqrt{2} \times 1 \times \frac{1}{\sqrt{2}} \times \sin \alpha = \frac{1}{2} \Rightarrow \sin \alpha = \frac{1}{2}$$

$$\sin \alpha = \frac{1}{2}$$

$$\alpha = 30^\circ$$

$$\frac{1}{2} = \frac{1}{2}$$



$$r_m \times r_n \times \sin(100^\circ), \text{ etc}$$

$$\frac{1}{r} \times \sin A$$

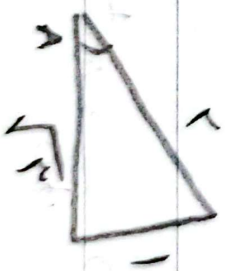
$$P_{51}(r(\sqrt{11})) + r(\sqrt{11}) = 1.0 \sqrt{11} \quad \overline{r_0 \sqrt{r}} \int$$

$$S_{ABC} - S_{ADE} = \frac{V}{3}$$

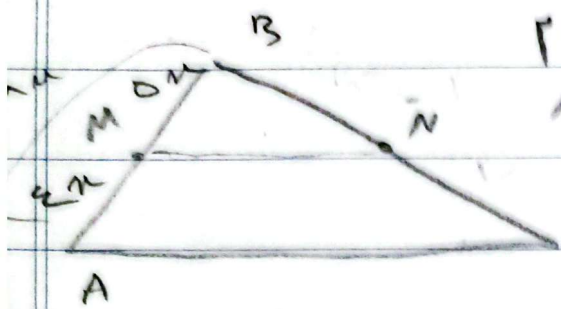
$$\frac{1}{r} \times \sin A \times \sin A = \frac{1}{r} \times \sin A$$

$$\frac{r_0}{r} \sin A = \frac{r_0}{r} \sin A = \frac{V}{3}$$

$$\sin A \frac{V}{r} = \frac{V}{3} \quad \sin A = \frac{1}{r}$$



$$\tan A = \frac{1}{\sqrt{3}}$$



$$BN, NC \quad BC, BN + NC$$

$$NC = \frac{r}{p} BN \quad BC = BN + \frac{r}{p} BN = \frac{p+r}{p} BN$$

$$\frac{S_{ABC}}{S_{BMN}} = \frac{AB \times \sin B \times BC \times \frac{1}{2}}{MB \times \sin B \times BN \times \frac{1}{2}}$$

$$\frac{AB \times \frac{p}{p+r} BN}{MB \times BN} = \frac{AB}{MB} = \frac{p}{r}$$

$$\frac{BM}{AM} = \frac{DN}{EM} = \frac{p}{r}$$

$$\frac{|\sin|}{\cos a} = -\frac{\sin}{\cos} \quad \sin < 0$$

موجب

$$\frac{1}{|\cos|} = \frac{\sin}{\cos} = \frac{1 + \sin a}{\cos a} \quad \cos < 0$$