#Jenny

Finally I get this ebook, thanks for all these I can get now!

#Rio

Cool! I'am really happy

#Markus Jensen

I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu

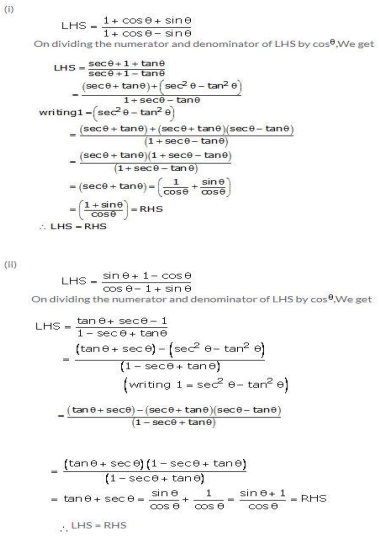
wtf this great ebook for free?!

#Che Salsa

My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler

so many fake sites. this is the first one which worked! Many thanks



(i)

$$\text{LHS} = \frac{1+\cos\theta+\sin\theta}{1+\cos\theta-\sin\theta}$$

On dividing the numerator and denominator of LHS by $\cos\theta$, We get

$$\text{LHS} = \frac{\sec\theta+1+\tan\theta}{\sec\theta+1-\tan\theta}$$

$$= \frac{(\sec\theta+\tan\theta)+(\sec^2\theta-\tan^2\theta)}{1+\sec\theta-\tan\theta}$$

writing $1 = (\sec^2\theta-\tan^2\theta)$

$$= \frac{(\sec\theta+\tan\theta)+(\sec\theta+\tan\theta)(\sec\theta-\tan\theta)}{(1+\sec\theta-\tan\theta)}$$

$$= \frac{(\sec\theta+\tan\theta)(1+\sec\theta-\tan\theta)}{(1+\sec\theta-\tan\theta)}$$

$$= (\sec\theta+\tan\theta) = \left(\frac{1}{\cos\theta}+\frac{\sin\theta}{\cos\theta}\right)$$

$$= \left(\frac{1+\sin\theta}{\cos\theta}\right) = \text{RHS}$$

$\therefore$ LHS = RHS

(ii)

$$\text{LHS} = \frac{\sin\theta+1-\cos\theta}{\cos\theta-1+\sin\theta}$$

On dividing the numerator and denominator of LHS by $\cos\theta$, We get

$$\text{LHS} = \frac{\tan\theta+\sec\theta-1}{1-\sec\theta+\tan\theta}$$

$$= \frac{(\tan\theta+\sec\theta)-(\sec^2\theta-\tan^2\theta)}{(1-\sec\theta+\tan\theta)}$$

$$\{\text{writing } 1 = \sec^2\theta-\tan^2\theta\}$$

$$= \frac{(\tan\theta+\sec\theta)-(\sec\theta+\tan\theta)(\sec\theta-\tan\theta)}{(1-\sec\theta+\tan\theta)}$$

$$= \frac{(\tan\theta+\sec\theta)\{1-\sec\theta+\tan\theta\}}{(1-\sec\theta+\tan\theta)}$$

$$= \tan\theta+\sec\theta = \frac{\sin\theta}{\cos\theta}+\frac{1}{\cos\theta} = \frac{\sin\theta+1}{\cos\theta} = \text{RHS}$$

$\therefore$ LHS = RHS

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