PRINTABLE NOTEPAD 1

8.

$\tan^2 x \neq \frac{1-(\cos 2x)}{1+(\cos 2x)} \Rightarrow$

$\cos 2x = \cos^2 x - \sin^2 x$

$= 1 - 2\sin^2 x$

$= 2\cos^2 x - 1$

$= \frac{1-(1-2\sin^2 x)}{1+(2\cos^2 x - 1)}$

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

$= \frac{2\sin^2 x}{2\cos^2 x}$

$= \frac{\sin^2 x}{\cos^2 x}$

$= \tan^2 x$ ∎

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