10. $\dfrac{\tan^2 x}{\sec x + 1} = \dfrac{1-\cos x}{\cos x}$

$\dfrac{\tan^2 x}{\sec x + 1} \cdot \dfrac{\sec x - 1}{\sec x - 1}$

$\dfrac{\tan^2 x (\sec x - 1)}{\sec^2 x - 1}$

(16) $\tan^2 x + 1 = \sec^2 x$

$\tan^2 x = \sec^2 x - 1$

$\dfrac{\tan^2 x (\sec x - 1)}{\tan^2 x}$

$\sec x - 1$

(5)

$\dfrac{1}{\cos x} - 1$

$\dfrac{1}{\cos x} - \dfrac{1}{1}$

$\dfrac{1}{\cos x} - \dfrac{\cos x}{\cos x}$

$\dfrac{1-\cos x}{\cos x}$ ✓

11. $\dfrac{\tan x + \sin x}{\tan x - \sin x} = \dfrac{\sec x + 1}{\sec x - 1}$

$\dfrac{\frac{\tan x}{\sin x} + \frac{\sin x}{\sin x}}{\frac{\tan x}{\sin x} - \frac{\sin x}{\sin x}}$

(7)

$\dfrac{\frac{\frac{\sin x}{\cos x}}{\sin x} + 1}{\frac{\frac{\sin x}{\cos x}}{\sin x} - 1}$

$\dfrac{\frac{\sin x}{\cos x} \div \sin x + 1}{\frac{\sin x}{\cos x} \div \sin x - 1}$

$\dfrac{\frac{\sin x}{\cos x} \div \frac{\sin x}{1} + 1}{\frac{\sin x}{\cos x} \div \frac{\sin x}{1} - 1}$

$\dfrac{\frac{\sin x}{\cos x} \cdot \frac{1}{\sin x} + 1}{\frac{\sin x}{\cos x} \cdot \frac{1}{\sin x} - 1}$

$\dfrac{\frac{1}{\cos x} + 1}{\frac{1}{\cos x} - 1}$

(5)

$\dfrac{\sec x + 1}{\sec x - 1}$ ✓