

تمرین موجه

4. اثبت أن $\sin^2 x \tan^2 x \csc^2 x + \cos^2 x \tan^2 x \csc^2 x = \sec^2 x$

$$\tan^2 x \csc^2 x (1)$$

$$\frac{\sin^2 x}{\cos^2 x} \times \frac{1}{\sin^2 x}$$

$$\frac{1}{\cos^2 x} = \sec^2 x$$

$$\tan^2 x \csc^2 x (\sin^2 x + \cos^2 x)$$