

Answer on Question #47730 – Math – Trigonometry

Show that it is an identity by transforming the side of each one into the right side.

$$1 - \sin/csc = \cos^2$$

Solution

Use trigonometric identity $\sin^2(x) + \cos^2(x) = 1$

$$1 - \sin(x)/csc(x) = 1 - \sin(x)/(1/\sin(x)) = 1 - \sin(x)*\sin(x) = 1 - \sin^2(x) = \cos^2(x).$$