

Answer on Question#34933 – Math – Trigonometry

Question.

$$(\sec^2(x)-1)*\cot^2(x)=$$

Solution.

$$\begin{aligned}(\sec^2(x) - 1) * \cot^2(x) &= \left(\frac{1}{(\cos(x))^2} - 1\right) * \frac{(\cos(x))^2}{(\sin(x))^2} = \frac{1 - (\cos(x))^2}{(\cos(x))^2} * \frac{(\cos(x))^2}{(\sin(x))^2} \\ &= (\sin(x))^2 * \frac{1}{(\sin(x))^2} = 1\end{aligned}$$

Answer.

1