The Weekly Rigor

No. 370

"A mathematician is a machine for turning coffee into theorems."

July 24, 2021

Verifying Trigonometric Identities with Simple Arguments Involving the Product of Two Trigonometric Functions: Problems with Solutions (Part 4)

15.
$$\tan \theta \cdot \sec \theta = \frac{\sin \theta}{1-\sin^{-2}\theta}$$
.

16.
$$\cot \theta \cdot \csc \theta = \frac{\cos \theta}{1 - \cos^2 \theta}$$
.

17. $\sin \theta \cdot \tan \theta = \sec \theta - \cos \theta$.

18. $\cos \theta \cdot \cot \theta = \csc \theta - \sin \theta$.