

# The Weekly Rigor

---

No. 373

“A mathematician is a machine for turning coffee into theorems.”

August 14, 2021

---

## Verifying Trigonometric Identities with Simple Arguments Involving the Product of Two Trigonometric Functions: Problems with Solutions (Part 7)

$$27. \tan \theta \cdot \sec \theta = \frac{\cos \theta \cdot \tan \theta}{1 - \cos^2 \theta \cdot \tan^2 \theta}.$$

$$28. \cot \theta \cdot \csc \theta = \frac{\sin \theta \cdot \cot \theta}{1 - \sin^2 \theta \cdot \cot^2 \theta}.$$

29.  $\sin \theta \cdot \tan \theta = \tan \theta \cdot \csc \theta - \sin \theta \cdot \cot \theta.$

30.  $\cos \theta \cdot \cot \theta = \cot \theta \cdot \sec \theta - \cos \theta \cdot \tan \theta.$

“Only he who never plays, never loses.”

---

Written and published every Saturday by Richard Shedenhelm

WeeklyRigor@gmail.com