Lesson 1.5 Practice: The Reciprocal Ratios

School Launch · Trigonometry · Unit 1: Right-Triangle Trigonometry · Worksheet A

Scientific calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. If $\sin\theta = \frac{3}{5}$ with θ acute, find $\csc\theta$. EASY

2. If $\tan\theta = \frac{9}{40}$ with θ acute, find $\cot\theta$. EASY

3. If $\sin\theta = \frac{7}{25}$ with θ acute, find $\csc\theta$. EASY

4. If $\sin\theta = \frac{5}{13}$ with θ acute, find $\csc\theta$. MEDIUM

5. If $\tan\theta = \frac{8}{15}$ with θ acute, find $\cot\theta$. MEDIUM

6. If $\cos\theta = \frac{4}{5}$ with θ acute, find $\sec\theta$. MEDIUM

7. If $\tan\theta = \frac{7}{24}$ with θ acute, find $\cot\theta$. MEDIUM

8. If $\tan\theta = \frac{7}{24}$ with θ acute, find $\cot\theta$ and the other four ratios. HARD

9. If $\sin\theta = \frac{9}{41}$ with θ acute, find $\csc\theta$ and the other four ratios. HARD

10. If $\tan\theta = \frac{3}{4}$ with θ acute, find $\cot\theta$ and the other four ratios. HARD