Lesson 6.3 Practice: Compositions with Inverse Functions

School Launch · Trigonometry · Unit 6: Inverse Functions and Trigonometric Equations · 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. Find the exact value: $\sin\left(\tan^{-1}\frac{5}{12}\right)$. EASY

2. Find the exact value: $\cos\left(\sin^{-1}\frac{9}{41}\right)$. EASY

3. Find the exact value: $\cos\left(\sin^{-1}\frac{20}{29}\right)$. EASY

4. Find the exact value: $\cos\left(\sin^{-1}\frac{7}{25}\right)$. MEDIUM

5. Find the exact value: $\sin\left(\tan^{-1}\frac{8}{15}\right)$. MEDIUM

6. Find the exact value: $\cos\left(\sin^{-1}\frac{3}{5}\right)$. MEDIUM

7. Find the exact value: $\cos\left(\sin^{-1}\frac{5}{13}\right)$. MEDIUM

8. Find the exact value: $\sin\left(\tan^{-1}\frac{7}{24}\right)$. HARD

9. Find the exact value: $\tan\left(\cos^{-1}\frac{21}{29}\right)$. HARD

10. Find the exact value: $\tan\left(\cos^{-1}\frac{40}{41}\right)$. HARD