Lesson 1.2 Practice: Sine, Cosine and Tangent

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. A right triangle has legs 7 (opposite θ) and 24 (adjacent), hypotenuse 25. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. EASY

2. A right triangle has legs 20 (opposite θ) and 21 (adjacent), hypotenuse 29. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. EASY

3. A right triangle has legs 8 (opposite θ) and 15 (adjacent), hypotenuse 17. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. EASY

4. A right triangle has legs 40 (opposite θ) and 42 (adjacent), hypotenuse 58. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. MEDIUM

5. A right triangle has legs 3 (opposite θ) and 4 (adjacent), hypotenuse 5. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. MEDIUM

6. A right triangle has legs 60 (opposite θ) and 63 (adjacent), hypotenuse 87. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. MEDIUM

7. A right triangle has legs 9 (opposite θ) and 40 (adjacent), hypotenuse 41. Give $\sin\theta$, $\cos\theta$, $\tan\theta$ as reduced fractions. MEDIUM

8. A right triangle has legs 15 (opposite θ) and 36 (adjacent), hypotenuse 39. Give $\sin\theta$, $\cos\theta$, $\tan\theta$, $\csc\theta$, $\sec\theta$, $\cot\theta$ as reduced fractions. HARD

9. A right triangle has legs 7 (opposite θ) and 24 (adjacent), hypotenuse 25. Give $\sin\theta$, $\cos\theta$, $\tan\theta$, $\csc\theta$, $\sec\theta$, $\cot\theta$ as reduced fractions. HARD

10. A right triangle has legs 10 (opposite θ) and 24 (adjacent), hypotenuse 26. Give $\sin\theta$, $\cos\theta$, $\tan\theta$, $\csc\theta$, $\sec\theta$, $\cot\theta$ as reduced fractions. HARD