Lesson 2.1 Practice: The 45-45-90 Triangle

School Launch · Trigonometry · Unit 2: Special Right Triangles and Exact Values · 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 45-45-90 triangle has hypotenuse 14. Find each leg (simplest radical form). EASY

2. A 45-45-90 triangle has a leg of 7. Find the hypotenuse, and give $\sin 45^\circ$ exactly. EASY

3. A 45-45-90 triangle has hypotenuse 9. Find each leg (simplest radical form). EASY

4. A 45-45-90 triangle has a leg of 9. Find the hypotenuse, and give $\sin 45^\circ$ exactly. MEDIUM

5. A 45-45-90 triangle has a leg of 12. Find the hypotenuse, and give $\sin 45^\circ$ exactly. MEDIUM

6. A 45-45-90 triangle has a leg of 2. Find the hypotenuse, and give $\sin 45^\circ$ exactly. MEDIUM

7. A 45-45-90 triangle has a leg of 5. Find the hypotenuse, and give $\sin 45^\circ$ exactly. MEDIUM

8. A 45-45-90 triangle has a leg of 4. Find the hypotenuse, and give $\sin 45^\circ$ exactly. HARD

9. A 45-45-90 triangle has hypotenuse 7. Find each leg (simplest radical form). HARD

10. A 45-45-90 triangle has a leg of 13. Find the hypotenuse, and give $\sin 45^\circ$ exactly. HARD