Lesson 9.1 Practice: The Pythagorean Theorem and Its Proofs

School Launch · Geometry · Unit 9: Right Triangles and Trigonometry · Worksheet A

Calculator allowed

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 and 7. Find the hypotenuse (exact, and to the nearest tenth). EASY

2. A right triangle has legs 9 and 14. Find the hypotenuse (exact, and to the nearest tenth). EASY

3. A right triangle has legs 7 and 11. Find the hypotenuse (exact, and to the nearest tenth). EASY

4. A right triangle has hypotenuse 19 and one leg 4. Find the other leg (exact). MEDIUM

5. A right triangle has hypotenuse 10 and one leg 4. Find the other leg (exact). MEDIUM

6. A right triangle has hypotenuse 30 and one leg 5. Find the other leg (exact). MEDIUM

7. A right triangle has hypotenuse 14 and one leg 4. Find the other leg (exact). MEDIUM

8. A 21-foot ladder leans against a wall with its foot 4 ft from the wall. How high up the wall does it reach (nearest tenth)? HARD

9. A 12-foot ladder leans against a wall with its foot 8 ft from the wall. How high up the wall does it reach (nearest tenth)? HARD

10. A 24-foot ladder leans against a wall with its foot 5 ft from the wall. How high up the wall does it reach (nearest tenth)? HARD