Lesson 9.3 Practice: Similar Right Triangles and the Geometric Mean

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. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 9 and 7. Find the altitude (simplest radical form). EASY

2. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 11 and 3. Find the altitude (simplest radical form). EASY

3. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 3 and 6. Find the altitude (simplest radical form). EASY

4. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 8 and 4. Find the altitude (simplest radical form). MEDIUM

5. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 5 and 9. Find the altitude (simplest radical form). MEDIUM

6. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 12 and 6. Find the altitude (simplest radical form). MEDIUM

7. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 11 and 10. Find the altitude (simplest radical form). MEDIUM

8. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 2 and 9. Find the altitude (simplest radical form). HARD

9. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 5 and 11. Find the altitude (simplest radical form). HARD

10. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments of 10 and 6. Find the altitude (simplest radical form). HARD