# Lesson 12.7 Practice: Using the Pythagorean Theorem

School Launch · Pre-Algebra · Unit 12: Geometry · Worksheet A

No 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 $12$ and $9$. Find the hypotenuse (exact, and to the nearest tenth). EASY

**2.** Find the distance and the midpoint between $(-4, -8)$ and $(1, 4)$. EASY

**3.** A right triangle has legs $5$ and $15$. Find the hypotenuse (exact, and to the nearest tenth). EASY

**4.** Find the distance and the midpoint between $(-8, 1)$ and $(-4, -6)$. MEDIUM

**5.** A right triangle has hypotenuse $11$ and one leg $4$. Find the other leg (exact). MEDIUM

**6.** Find the distance and the midpoint between $(-1, 4)$ and $(-4, 6)$. MEDIUM

**7.** A right triangle has hypotenuse $25$ and one leg $4$. Find the other leg (exact). MEDIUM

**8.** A right triangle has legs $2$ and $2$ inches. Find the hypotenuse in simplest radical form. HARD

**9.** 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

**10.** A right triangle has legs $3$ and $2$ inches. Find the hypotenuse in simplest radical form. HARD