

The Pythagorean Theorem

(original)

Objective: Understand and apply the Pythagorean Theorem (8.G.6, 8.G.7, 8.G.8)

Launch: Tell students to list everything they know about triangles. Have them share with their neighbor.

Introduction: Pass out sheet with two right triangles on it. (3-4-5 and 5-12-13). Instruct students to measure each side to the nearest centimeter. Have students square each measurement and then ask, "What do you notice?" Lead discussion to discover that the sum of the squares of the two smaller sides equals the square of the larger side.

Practice: Have students use whiteboards to practice the following problems:

Find the length of the missing side.

$$a = 5 \quad b = 8 \quad c = ?$$

$$a = 4 \quad b = 5 \quad c = ?$$

$$b = 15 \quad c = 17 \quad a = ?$$

Independent Practice: Assign pg 366 (1-21)

Extension: Word Problems pg 366-367 (1-8)

Assessment: Quiz