Georgia Department of Education

Common Core Georgia Performance Standards Framework Eighth Grade Mathematics • Unit 3

*SE TASK: Finding Pythagorean Triples in Disguise

Directions for Finding Pythagorean Triples in Disguise:

1. Is a triangle with side lengths of 3cm, 4cm, and 5cm a right triangle? 2. Given two triangles with the side lengths (1 cm, 2cm, 3cm) and (1.5 cm, 2 cm, 2.5 cm), which one would be a right triangle? 3. Identify any relationships between the right triangles in question #1 and question #3. 4. Can you find other Pythagorean Triples based upon the relationships you discovered in question #3? If so find three more and describe a general way to find more. 5. Can you find other right triangles based upon a triangle with side lengths of 5 ft, 12 ft, and 13 ft? If so provide a transformation that would create more. 6. Based upon what you have discovered, find three right triangles based upon the Pythagorean Triple of 8, 15, and 17. Explain how you know these are right triangles.

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