Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table# \_\_\_\_ Period: \_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.5B NOTES – Converse of The Pythagorean Theorem**

*Objective: Use the converse of the Pythagorean Theorem to identify right triangles. CCSS: 8.G.6*

*Video:* [*https://www.youtube.com/watch?v=NIdVnE2Ab-k*](https://www.youtube.com/watch?v=NIdVnE2Ab-k)



**EXAMPLE 1:** (p. 320)

DIRECTIONS: Tell whether each triangle is a right triangle.

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| **EXAMPLE 2:** Tell whether a triangle with the given side lengths is a right triangle: $\sqrt{18}, 8, 9$ |

**ON YOUR OWN** (p. 320)

DIRECTIONS: Tell whether the triangle with the given side lengths is a right triangle.

|  |  |  |
| --- | --- | --- |
| 1. 28 in., 21 in., 20 in.
 | 1. 1.25 mm, 1 mm, 0.75 mm
 | 1. Tell whether a triangle with the given side lengths is a right triangle: $\sqrt{105}, 19, 16$
 |

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| **Example 4:****One of the sides of a right triangle has a measurement of 15 units. Which of these statements is correct? Select all that apply.**1. The length of the other leg is 8 units, the length of the hypotenuse is 17.
2. The length of the legs are 9 units and 12 units.
3. The length of the other leg is 36, the length of the hypotenuse is 40.
4. The length of the other leg is 20, the length of the hypotenuse is 25.
 |

***CLASSWORK:*** *Login BIM and complete 7.5B pg 322 #5 –10, 19 – 21, 23. Show your work on this paper.*

|  |  |
| --- | --- |
| *5.* | *6.* |
| *7.* | *8.* |
| *9.* | *10.* |
| *19.* | *20.* |
| *21.* | *23.* |