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| Topic:  **Pythagorean Theorem Applications**  **Questions/Main Ideas:** | Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Learning Targets:** We will analyze word problems to determine if we can apply the Pythagorean Theorem or Pythagorean Theorem Converse. |
| * How do I know if I need to use the Pythagorean theorem? * How do I know when to use the converse of the Pythagorean Theorem? | Examples:  You are having a birthday party and stake a helium filled balloon to the ground with a 10 foot string so people can find your house. The wind has picked up and the balloon is now 6 feet away from its original position. How far above the ground is the balloon?  In baseball, the distance between each of the consecutive bases is 90 feet. How far does the catcher have to throw the ball to get from home plate to 2nd base? How far is the throw from 3rd base to 1st base?       Mr. Winston is adding a sunroom to his house. After laying the foundation and building the frame he double checks his measurements. Mr. Winston found that his 14 ft by 13 ft sunroom had a diagonal measurement of 20 ft. Why is Mr. Winston in trouble? |
| **Summary:** |  |