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## Proof of the Pythagorean Theorem and its Converse - Independent Practice W orksheet

Solve all the problems. Draw figures to help you to solve the problems.

1. A triangle shaped wall is 7 feet long and 9 feet wide. How long is the diagonal of triangle?
2. A car drives 50 miles east and then 40 miles due north. How far is it from where it started?
3. Brett has leaned a five-meter-long ladder against his house to paint a window. He placed the base of the ladder 3 m away from the wall. How far up is the window?
4. Neil is 4 feet tall and the length of his shadow is 3 feet. Find the distance of Neil from the end of the shadow.

5. A triangle shaped paper has sides with lengths of 30 inches, 40 inches, and 50 inches. Is it a right triangle?
6. Kevin has a triangle table cloth with side lengths of 5 inches, 12 inches. He wants to cover a right angled triangle table with table cloth. Find if the cloth is appropriate for the table.
7. A triangle has sides with lengths of 10 kilometers, 26 kilometers, and 27.8 kilometers. Is it a right triangle?
8. A triangle has sides with lengths of 16 kilometers, 30 kilometers, and 34 kilometers. Is it a right triangle?
9. There is a telephone wire pole of 25 ft which has a support wire of 24 ft that runs from its top to the ground. Find the distance of pole from the wire at ground.
