Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_

**Pythagorean Theorem Word Problems**

**Extra Practice**

**Remember the steps!! Draw a sketch. Circle the hypotenuse. Write the formula. Substitute values. Solve. (Do neatly on lined paper.)**

1.Janet looks around at an assembly. She notices her younger sister to her right and her older brother 3 meters ahead of her. If Janet's brother and sister are 5 meters apart, how far apart are Janet and her younger sister?

2.In Somersville, the library is due south of the courthouse and due west of the community swimming pool. If the distance between the library and the courthouse is 12 miles and the distance between the courthouse and the city pool is 15 miles, how far is the library from the community pool?

3.Billy is attending a school orchestra concert. He sees his math teacher seated 8 feet ahead of him and his science teacher seated 6 feet to his right. How far apart are the two teachers?

4.To repair a roof that is 3 meters high, Mr. Clay leans a 5-meter ladder against the side of the building. To reach the roof, how far away from the building should he place the base of the ladder?

5.An envelope is 8 inches wide, and it measures 17 inches along the diagonal. How tall is the envelope?