MATD 0370 – Elementary Algebra **Name**_____
Written Homework 10 – Show all work to receive credit.

Word Problems with Quadratic Equations (Section 5.7)

For each problem you need to define your variable, set up an equation, solve, and identify your answers with appropriate labels or units.

1) The base of a triangle is 10 cm longer than its height. The area is 48 cm^2. Find the height and the base.

2) In a sports league of x teams in which all teams play each other twice, the total number N of games played is given by $N = x^2 - x$. If a league has a total of 132 games, how many teams are in the league?