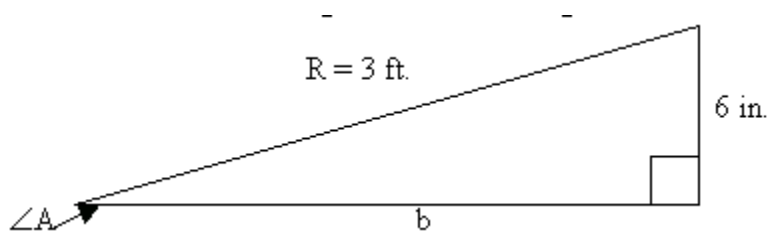


## Algebra Applications

### Right Angle Trig: Measuring the Hell Raisers

In Right Triangles and Basic Trigonometry lesson, we were able to find the values of angles and sides using trigonometry. To understand the concepts and trigonometry we will look at the old “Hell Raisers” used in the BattleBox playing field prior to Season 3.0. As you can see the Hell Raisers have a hypotenuse of 3 feet, a height of 6 inches and a length unknown. Find the bottom length and find the angle of inclination of the Hell Raiser?



1. Find the length of the unknown side. (Remember this is a right triangle.)

2. Find the angle of inclination.

3. Find the angle when the height is 1 inch off the playing field.