

Name:

Date:

Period:

Air Rocket Lab - CALCULATIONS MAKEUP ASSIGNMENT

Purpose

Your goal is to predict where your rocket will land if it is launched with an initial velocity of **24 m/s** at an angle of **35°**.

Calculation

1. Draw a diagram of the motion of the rocket.
2. List all of your known values for this lab. Think about what values you need from your instructor. Make your T-chart below:

x -direction	y -direction

3. Solve for how far away your rocket will land. A few hints:
 - (a) First, find the x - and y - components of the initial velocity
 - (b) Second, you need to know how long it will be in the air
 - (c) Finally, you should be able to use these calculations to find the x -displacement.