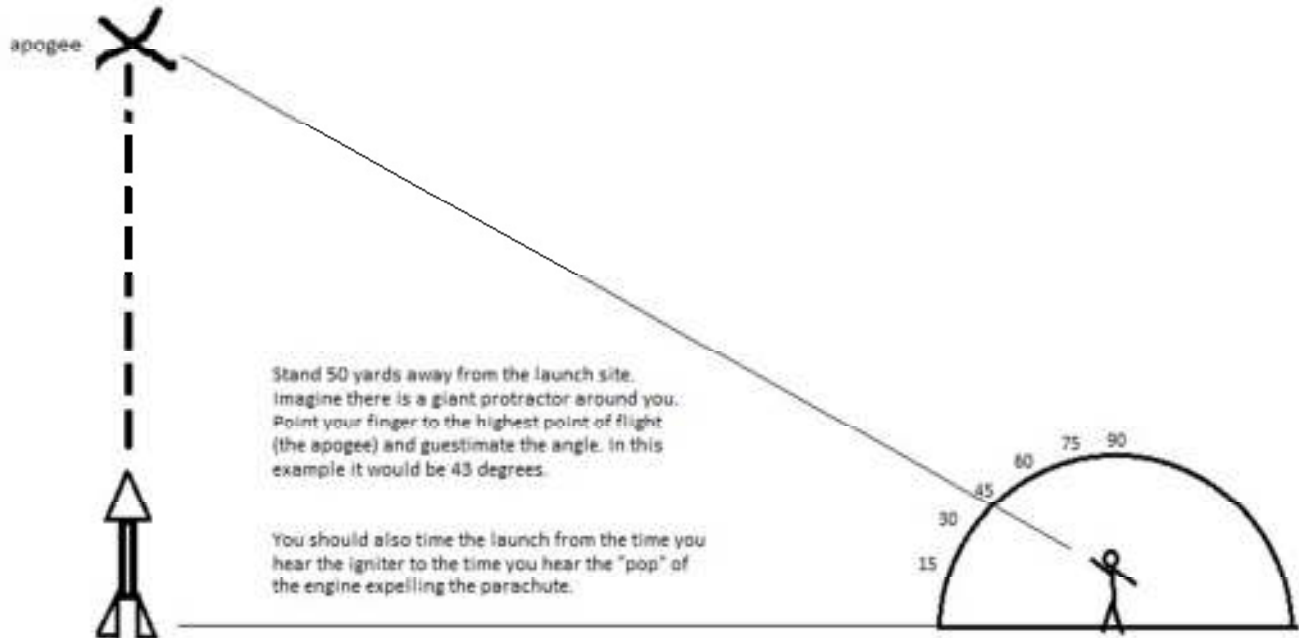


Name: _____ Date: _____

Rocket Science!

1. How high did my rocket fly? To find out the apogee of your rocket, we are going to use simple trigonometry (SOHCAHTOA).

The equation is $\tan \theta = \text{opposite side} / \text{adjacent side}$. We know the distance of the adjacent side (50 yards or 150 feet) and we will measure the theta angle to find out the height the rocket flew. Show your work!



My angle of inclination is _____. The apogee of my rocket was _____ feet.

2. How fast did my rocket go? Speed is simply $\text{distance} \div \text{time}$. Take the height you found in question 1 and divide it by the time it took to reach the apogee. This answer will be feet per second. Convert this answer to miles per hour by multiplying the feet per second answer by 3,600, then dividing by 5,280. Show your work below.