Name _____

In a neighborhood water balloon battle, Dudley has developed a winning strategy. He has his home base situated five feet behind an eight-foot fence. 25 feet away on the other side of the fence is his nemesis' camp. Dudley uses a water balloon launcher, and shoots his balloons so that they just miss the fence and land in his opponent's camp. Write an equation that, when graphed, will model the trajectory (path) of the water balloon. Include a labeled diagram.

ATTEMPT TO SET UP YOUR AXES (x and y) so that the
WATER BALOON STARTS AT x=0

Use your model to predict the height of the balloon at the exact moment it has traveled 20 feet along the ground (total).