Baseball players focus on obtaining a good launch angle with high exit velocity when hitting. These two factors play a key role in terms of predicting the outcome of a batted ball. For instance, a batted ball with low launch angle (less than 5 degrees) will likely result in a ground out regardless of its exit velocity, while a batted ball with launch angle of 25 degrees will result in a line drive single or could reach over the fence if the exit velocity is high enough. Of course, there are other factors that could change the outcome of a batted ball including spray angle and ball spin. But since they are hard to control by the hitter and aren’t as important as launch angle and exit velocity when predicting an outcome, we will only focus on these two for now.

Some might also argue that players like Ichiro Suzuki intentionally hit bloopers with high launch angle and low exit velocity to let the ball drop in between an outfielder and an infielder to earn a single. However, there are only few players in the MLB history that are capable of doing this, and most hitters tries to hit line drives with high exit velocity. So, we will obey the data and focus on the majority.

The launch angle that gives the maximum exit velocity is parallel to the approach angle, but this launch angle isn’t optimal for a home run.

The optimal launch angle is “ “, but this varies between hitters.

Different players have different approach angle and swing path.

What gives high launch angle is hitting a ball with a barrel.

Purpose of this.