

Jamison White  
*Golf Ball vs. Mathematics*

For my project I was testing whether you can accurately predict how far a golf ball will go with a mathematical equation.

I predicted that you can accurately predict how far a golf ball is hit with a mathematical equation because I am using the Doppler so that I can get exact measurements to calculate the distance mathematically.

I tested this by using the equation  $(V^2 \times \sin(2 \times A)) / g$  to determine mathematically the distance a golf ball will go given the impact force of the club hitting the ball. I will use Adam Hulse as my test subject. He will hit the ball 16 times, using the Doppler it will be able to determine the actual distance the ball went. I will record the other data I collected too. Then I will calculate how far it is mathematically. Finally compare. The results I found are that you cannot get a spot on prediction but you can get a ballpark estimate.

Since my average distance between the actual distance and the mathematical distance is about 12.2 yards I can concluded that you can predict in the ballpark but not dead on. My data contradicts my hypothesis because when I said accurate I meant about  $\frac{1}{2}$  a yard to a yard off, not 12 yards off. I also didn't have a very good reason that my hypothesis was right. I might have gotten accurate data from the Doppler but I didn't even think about the Equation not to be accurate about a Golf Ball.