VROOM

Goal: Collect data on the motion of YOUR car. Use that data to estimate how far to pull back the car so that it will come as close to 100 inches without going over.

1. Collect Data.

a) Set up a starting line for your car.

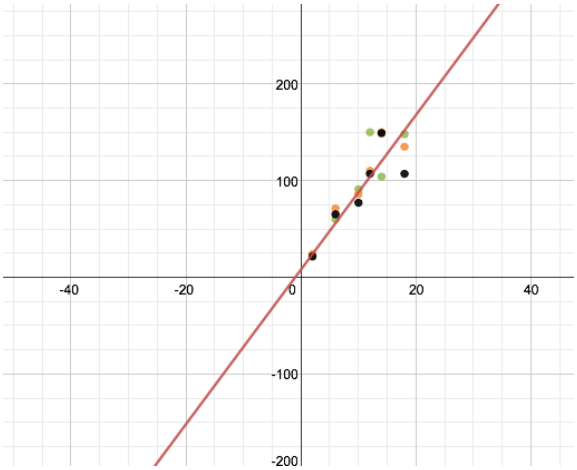
b) Pull back your car the indicated number of inches. Record how far it goes in the table below. Complete three trials for each initial distance.

Pull Back distance	Trial 1	Trial 2	Trial 3
2 “			
6”			
10”			
12”			

2. Use the Desmos app on the iPad to create a scatterplot.

3. With the help of your teacher enter in **y = mx + b** as a starting point for a line of best fit.

4. Adjust the values of b and m to make a line of best fit.
5. Use your line to determine how far back to pull your car so that it will come as close to 100 inches without going over.



Record here how far to pull back the car:

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Be careful you will get only 1 trial to get as close as you can.