Linear Regression: Smart Appliances

The following data was taken from the Statista website report on the Smart Home market on Jan 30, 2018: https://www.statista.com/outlook/279/109/smart-home/united-states#market-users.

The number of Smart Homes in the U.S. continues to increase. Market research provides the following data and projections for the number of U.S. homes (in millions) with devices in the "Smart Appliances" segment of the market.

Year	2016	2017	2018	2019	2020	2021	2022
Households (in millions)	10.65	13.98	17.86	22.12	26.71	31.70	37.13

Find the slope between several pairs of points. What do the results tell us about the data?

Let *t* be the number of years since 2016. Find a regression equation to model the number of homes (in millions) in the Smart Appliances market.

Use the regression equation to estimate when there will be 50 million U.S. households with devices in the Smart Appliances segment of the market.

In the "Control and Connectivity" segment of the Smart Home market, there were estimated to be 17.0 million households with devices in 2016, with the number of houses in this segment increasing at a rate of about 6.7 million per year. Write a linear equation for the estimated number of homes (in millions) with Control and Connectivity devices, where *t* is the number of years since 2016.