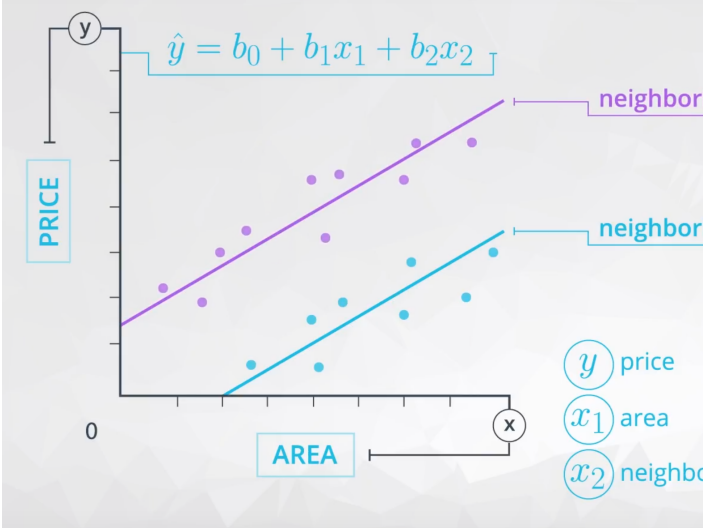
$x_1 x_2$

The example from the previous video used **area** (x_1) and the **neighborhood** (x_2 or **B**) to predict the home **price** (y). At the top of the screen in the video, you mig equation for a linear model using these variables as:

$$\hat{y} = b_0 + b_1 x_1 + b_2 x_2$$

This example does not involve an interaction term, and this model is appropriat the variables looks like that in the plot below.



where b_1 is the way we estimate the relationship between **area** and **price**, whicl believe to be the same regardless of the neighborhood.

Then b_2 is the difference in price depending on which neighborhood you are in, distance between the two lines here: