1 | **Types of ML**

- Supervised
  - Linear regression
    - Good for predicting the outcome of independent variables
    - We are trying to find a line – `y=mx+b`
    - What about with more features?
      - Just add dimensions
      - Not as visual, but math is the same
    - Helps to relate variables
    - Not good for:
      - What type of tree is x based upon height and width?
      - Not a numeric output
      - Can't just assign numbers to words, as 0-1-2 is related to each other; say, model says its a combo of 1 and 2, comes out to a 1, which DOESN'T work. (idk why that auto capitalized)
    - Very fast and simple, which makes output easy to understand
    - `=Assumes linear relation between incomes and outputs=`
      - Important to visualize our data even after we run out model Screen Shot 2020-08-26 at 1.25.42 PM.png
      - These all have the same best fit line, the same x mean, y mean, x y standard dev, and a bunch more
- Unsupervised
- Semi-Supervised

2 | **Used for:**

- Classification
- Clustering
  - Find related data points
- Regression
- Translation
- Anomaly Detection
  - $\text{KBPoker}_{\text{WithWes}}$ Poker Story
- Generation

3 | **Important terms:**

Weights Labels