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Chart

Description automatically generated

1. For the distribution of data shown in the graphs to the right, would you use liner or polynomial regression?
   1. **Using polynomial, because the relationship of data is not linear.**
   2. **Using linear, because the relationship of data is linear.**
2. Assume we are trying to predict the variety of iris from only two features, petal length and petal width. Using linear regression equation to predict the variety of an iris with a petal-length of 5.1 and a petal-width of 1.8.

**Y = 0.2 + 0.1\*(x1) + 0.05\*(x2) then plug in x1 = 5.1 and x2 = 1.8, y = 0.8 which is less than 1 and should be rounded to 1 by the context. So the prediction is iris-setosa.**