In groups of 2-3, work through these scenarios. You'll then present your responses to the class. Feel free to write on your desks or on the whiteboard for your visuals!

Describe a scenario in which our predictive model would perform well on both our training and test data.

- Give an example of what our training and test R2 scores would look like.
- What might our MSE look like on our training and test data?
- What term(s) would we use to describe this model?
- What might a graph of our model/prediction line look like?
- Would you do anything to correct your model? If so, what might you do?

Describe a scenario in which our model would perform extremely well on the training data and very poorly on our testing data.

- Give an example of what our training R2 score would look like and our testing R2 score would look like.
- What might our MSE look like on our training and test data?
- What term(s) might we use to describe this model.
- What might the graph of our model look like?
- Would you do anything to correct your model? If so, what might you do?

Describe a scenario in which our model performs approximately equally poorly on both the training and the testing sets.

- Give an example of what our training R2 score would look like and our testing R2 score would look like.
- What might our MSE look like on our training and test data?
- What term(s) might we use to describe this model?
- What might the graph of our model look like?
- Would you do anything to correct your model? If so, what might you do?

Describe a scenario in which our model performs poorly on the training set and performs even worse on our testing data.

- Give an example of what our training R2 score would look like and our testing R2 score would look like.
- Give an example of what the MSE might look like on the training and testing set.
- What term(s) might we use to describe this model?
- What might the graph of our model look like?
- Would you do anything to correct your model? If so, what might you do?