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Week 10 Reading Questions

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Q1: We would want the model selection criterion to penalize the number of parameters in a model because if we had a lot of parameters, we would have a complex model that would be hard to understand. Penalizing the number of parameters makes the model simpler.

Q2: Sometimes the predictor variables have values of zero. When this is the value, we know that y will change, because for every time x1 changes by one unit we expect Beta1 to change as well. The slope shows the change in the y value for every change in x1. It’s like y = mx + b. For example, if you could buy a soda for 99 cents every change in x the number of sodas would increase the cost by 99(y) cents and the slope is the cost of one soda.

Q3: The base case is waterLow.

Q4: The average mass in grams is 2.4. It’s the same as the estimate value.

Q5: The average mass in grams is 3.7 the base case estimate plus the waterMed estimate value.

Q6: The answer is A & C.