1. (a) Controlled Experiment
   (b)
   (c) Instruction outside of school, social environment in classes, social environment at home
2. (a) 35 minutes is 3 standard deviations away from the mean. This means that it is larger than pretty much all (99.7) of other driving times. Thus, this time is extremely unusual.
   (b) This abnormal time is likely caused by some other factor. This time is very far off from the normal time and seems to be an outlier.
3. (a) This distribution is skewed right
   (b) The median class size is about 700
   (c) We can find this out by adding the heights of the bars below 800 and those above 800 and comparing these values.

$$4 + 4 + 7 + 5 = 20$$

$$1 + 1 + 3 + 1 + 2 + 1 + 1 = 10$$

Thus, the number of classes with sizes less than 800 is greater than the number of those above.

4. (a)

$$r = 0.75$$

The data has a positive trend (positive slope), but it is not in a perfect line. Thus, the answer cannot be $r = 1$, leading us to $r = 0.75$.
   (b)

$$\text{Salary} = 30000 + 1000 \cdot (\text{years})$$

$$\text{Salary} = 30000 + 1000 \cdot (10)$$

$$\text{Salary} = 30000 + 10000$$

$$\text{Salary} = 40000$$