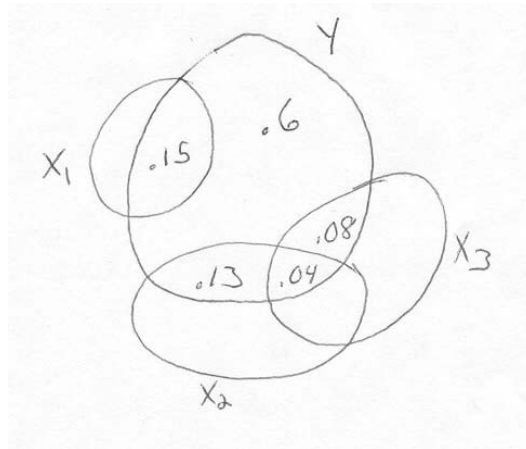


## Regression practice exercises: Exam 2

For each of the following Venn diagrams, please address the following questions:

- What proportion of variability is accounted for by the all of the predictor variables when entered at the same time?
- What is the unique contribution of predictor variable X3 to the regression equation (proportion of variability accounted for), when the other two predictor variables are also entered into the equation?
- Describe the steps that SPSS would take in applying the forward method of selecting predictor variables to the variables presented in the Venn diagram. Which variable will it select first? Which variable will it select second, etc? At each step, please state the multiple squared correlation for the regression equation up to that point. At what point will SPSS stop including more predictor variables? For the purposes of this exercise, assume that a contribution of 4% of the variability to the current equation being considered is statistically significant.
- Repeat part (c) except now describe what happens when the researcher decides to use the Backward method.
- Repeat part (c) except now describe what happens when the researcher decides to use the Stepwise method.

### Example A



### Example B

