1. Explanatory and Response

A study examines if state political repression increases the chances for popular revolution. What is the response variable in this study?

a) state  
b) popular revolution  
c) state political repression  
d) repression
2. Facts about Correlation

Compare the correlation coefficient. \( r \) for the data in Plots A and B.

**a)** \( r \) in Plot A is less than \( r \) in Plot B.

**b)** \( r \) in Plot A is equal to \( r \) in Plot B.

**c)** \( r \) in Plot A is greater than \( r \) in Plot B.

**d)** Not enough information exists to compare the two \( r \)'s.
3. Other Sampling Designs

A sample selected by taking the members of the population that are easiest to reach is called a __________ sample, which often produces __________ data.

a) convenience; representative
b) simple random; representative
c) convenience; unrepresentative
d) simple random; unrepresentative
Observation vs. Experiment

The *Minnesota Study of Twins Reared Apart* investigated whether attributes of twins are related to heredity or environment. The researchers assessed 56 pairs of identical twins reared apart as well as several hundred identical twins reared together. They compared the similarities of the twins in both groups.

Is this study an experiment or an observational study?

a) experiment
b) observational study
Researchers believed that floral scent can sometimes improve a person’s learning ability. They set up an experiment in which each of 22 subjects completed sets of mazes. Each subject wore a floral-scented mask and an unscented mask in random order. The researchers measured the time to complete the sets of mazes.

What is the response variable?

a) the amount of scent
b) presence or absence of the floral scent
c) time to complete the mazes
d) whether the subject was able to complete the mazes quicker while wearing the floral-scented mask