

For each study below, determine if it is an observational or experimental study, suggest some possible confounding variables, and state the explanatory and response variables.

- 1). A researcher stood at a busy intersection to see if the color of the car that a person drives is related to running red lights.
  - (i). Observational or experimental? \_\_\_\_\_
  - (ii). List some possible confounding variables:  
\_\_\_\_\_
  - (iii). Explanatory variable: \_\_\_\_\_
  - (iv). Response variable: \_\_\_\_\_
  
- 2). A researcher finds that people who are more hostile have higher total cholesterol levels than those who are less hostile.
  - (i). Observational or experimental? \_\_\_\_\_
  - (ii). List some possible confounding variables:  
\_\_\_\_\_
  - (iii). Explanatory variable: \_\_\_\_\_
  - (iv). Response variable: \_\_\_\_\_
  
- 3). A researcher randomly assigned the subjects into four groups. Each group is placed on one of four special diets – a low-fat diet, a high-fish diet, a combination of low fat diet and high-fish diet, and a regular diet. After six months, the blood pressures of the groups are compared to see if diet has any effect on blood pressure.
  - (i). Observational or experimental? \_\_\_\_\_
  - (ii). List some possible confounding variables:  
\_\_\_\_\_
  - (iii). Explanatory variable: \_\_\_\_\_
  - (iv). Response variable: \_\_\_\_\_