INDEPENDENT AND DEPENDENT VARIABLE EXERCISE 2

Read each scenario and indicate the independent variable and dependent variable.

1. A researcher wants to examine whether a new drug increases the maze running performance of rats. The researcher teaches two groups of rats to find a piece of food in a maze. One group of rats is given the new drug while they are learning the maze. The second group is not given the drug. One week after having learned the maze, the researcher retests the rats and records how long it takes them to find the food.
   - Independent Variable
   - Dependent Variable

2. A researcher wanted to study the effects of sleep deprivation on physical coordination. The researcher randomly selected a group of college students and deprived some of the participants to either 24, 36, or 48 hours of sleep.
   - Independent Variable
   - Dependent Variable

3. A researcher wanted to test whether the number of people present (either 1, 6, 12, 24) would influence subjects’ judgments on a simple perceptual task. In each case, the other members of the group gave the incorrect answer. The researcher then noted whether the subject conformed to the group decision.
   - Independent Variable
   - Dependent Variable

4. A researcher had 20 participants watch a videotaped re-enactment of a jewelry store robbery. One-half of the participants were asked by a police investigator to recall the event, while the remaining participants were interviewed by a police investigator while they were hypnotized.
   - Independent Variable
   - Dependent Variable
INDEPENDENT AND DEPENDENT VARIABLE EXERCISE 2 – KEY

1. A researcher wants to examine whether a new drug increases the maze running performance of rats. The researcher teaches two groups of rats to find a piece of food in a maze. One group of rats is given the new drug while they are learning the maze. The second group is not given the drug. One week after having learned the maze, the researcher retests the rats and records how long it takes them to find the food.
   - Independent Variable
     The presence or absence of the drug
   - Dependent Variable
     Length of time it took the rats to remember where the food was located

2. A researcher wanted to study the effects of sleep deprivation on physical coordination. The researcher randomly selected a group of college students and deprived some of the participants to either 24, 36, or 48 hours of sleep.
   - Independent Variable
     Length of time the participant was sleep deprived (three categories/levels, 24, 36, and 48)
   - Dependent Variable
     Rating of physical coordination

3. A researcher wanted to test whether the number of people present (either 1, 6, 12, 24) would influence subjects’ judgments on a simple perceptual task. In each case, the other members of the group gave the incorrect answer. The researcher then noted whether the subject conformed to the group decision.
   - Independent Variable
     Number of people in the group (four categories/levels, 1, 6, 12, and 24)
   - Dependent Variable
     How often the participant conformed with the group

4. A researcher had 20 participants watch a videotaped re-enactment of a jewelry store robbery. One-half of the participants were asked by a police investigator to recall the event, while the remaining participants were interviewed by a police investigator while they were hypnotized.
   - Independent Variable
     Whether the participants were hypnotized or not
   - Dependent Variable
     How much the participants recalled