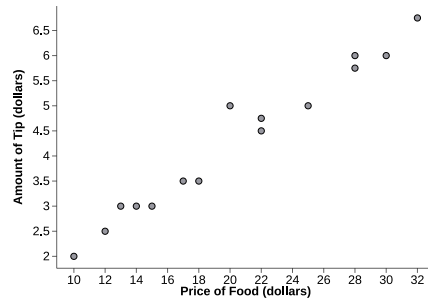


1. Explanatory: number of milligrams of caffeine consumption

Response: 40-yard dash time (in seconds)

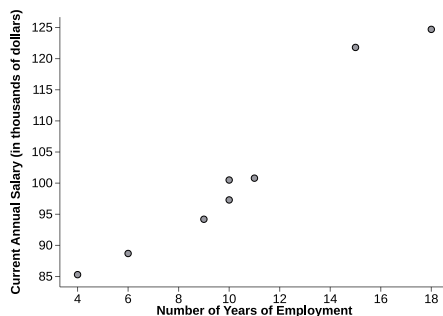
The researchers are investigating how caffeine consumption may affect the 40-yard dash time so caffeine consumption is the explanatory variable.

2. a. Price of food ordered is the explanatory variable.
b. Answers may vary.



3. There is a negative relationship between the number of days absent and the final grade. As the number of days absent increases, the final grade in the course decreases.
4. a. Explanatory: age (in years), response: height (in centimeters)
b. An appropriate scale would be 4 to 18 counting by twos.
c. An appropriate scale would be 110 to 190 counting by tens.

5. a.



- b. There is a strong, positive, linear relationship between years of employment and current salary. There does not appear to be any unusual behavior in the scatterplot.

6. There is a negative, strong, non-linear relationship between the number of rounds and the number of teams left in the March Madness basketball tournament. There is nothing unusual shown in the scatterplot.
7. C
8. A