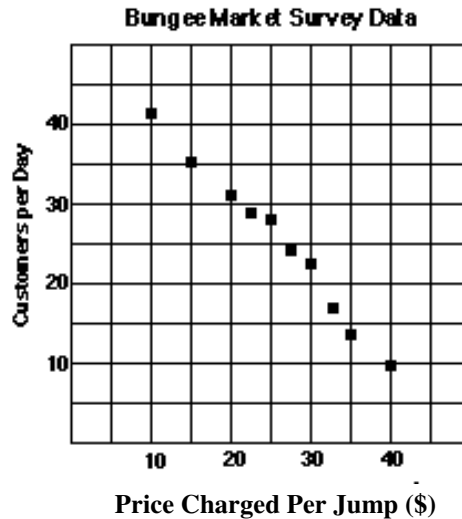


A Market Survey Application

The following graph shows data from a market research survey of potential bungee jump customers. People were asked how much they would pay to take a jump. Based on those results, the survey company predicted likely numbers of customers each day at several typical prices.



- Describe the trend of the relation between price per jump and customers per day as shown in the data plot. How will number of customers probably change as price is raised higher and higher?
- Draw a linear model that you believe fits the pattern in the data fairly well. Explain how you arrived at your model choice.
- Use your model to estimate the number of bungee jump customers when the price is set at \$15, \$25, and \$35.
- Find the equation $y = mx + b$ of a good fit linear model for the data pattern and explain what m and b tell about the situation.
- Suppose you found that the bungee jump averaged 32 customers per day in one month. Use the model you developed in part (d) above to estimate the price that had been set.