tmt³ Teaching Mathematics TEKS Through Technology
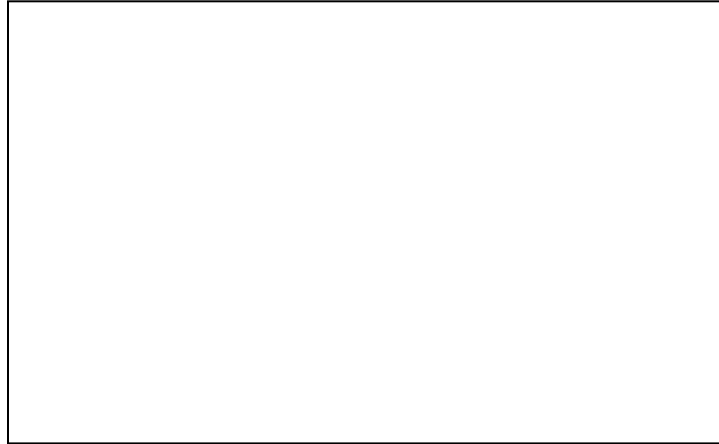*middle school*

Student Name(s)_____ Date_____

Round and Round

Open the **RoundandRound** spreadsheet.

A. Input your class data from Transparency 2. (Use the table that starts in row 6.)

   Sketch the scatterplot that resulted from entering class data.

B. For each statement, choose the scatterplot(s) that best represents the situation.

   _____1. After the 1st attempt, most students were able to increase the number of revolutions on their 2nd attempt.

   _____2. After the 1st attempt, most students made fewer revolutions on their 2nd attempt.

   _____3. The number of revolutions on the 1st attempt is about the same as the number of revolutions on the 2nd attempt.

   _____4. There is not a strong relationship between the number of revolutions made in the two attempts.

   _____5. Most students did considerably better on their 2nd attempt than on their 1st attempt.

   _____6. Based on the data you have from your class, which scatterplot would look most like yours? Explain.

7. Now that you have analyzed possible scenarios for scatterplots A, B, and C, write a statement that describes the relationship between the 1st attempt and 2nd attempt for your class.

8. Use formulas to calculate the mean, median, and mode of the data for the 1st attempt and for the 2nd attempt. (Use the table in rows 50-53.) Record the results below.

	1st attempt	2nd attempt
mean		
median		
mode		

9. Which measure of central tendency best describes the number of revolutions made on the 1st attempt and 2nd attempt? Explain your choice.

Student Name(s)_____ Date_____

What's In A Name?

Access the website **http://www.ssa.gov/OACT/babynames/**. In an earlier activity we compared the ranking of the top ten names of your parents' generation (1965) to the ranking of those names today to answer the question about how the popularity of names stands the test of time.

    a. Consider the following set of questions.
       How has the number of people having the most popular boy name changed over the last 10 years? How many people do you predict might have the most popular name in 2010?

    b. Open the **WhatName** spreadsheet and input the data to create a scatterplot.

    c. Draw a trendline if appropriate.

    d. Calculate the mean, median, and range of your data.

    e. Respond to the questions in part a. Justify your answers using the scatterplot, trendline, and/or statistical measurements to support your conclusions.

Student Name(s)_____ Date_____

1. The scatterplot below compares the score for amplitude (height) to the score for rotations (spins and flips) for six skateboarders at the weekend meet.

Halfpipe Scores

Rotation Score (out of 10 pts) vs. Amplitude Score (out of 10 pts)
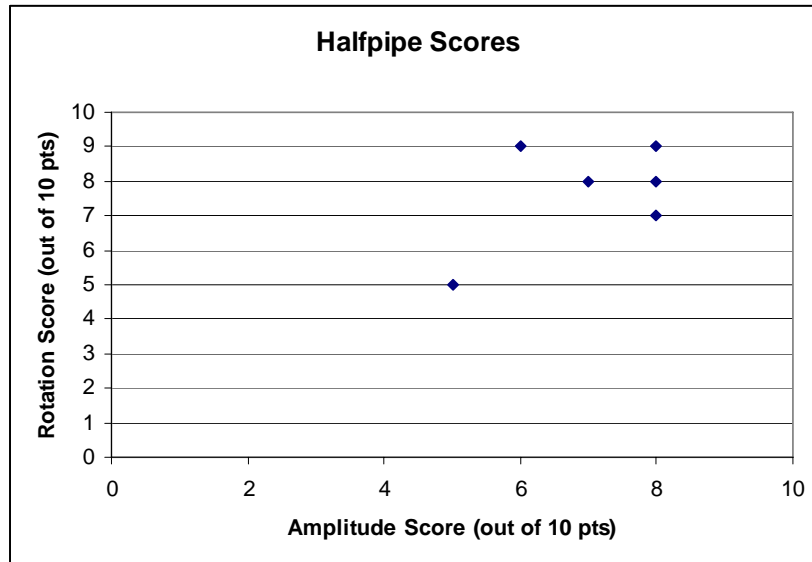
Which of the following statements would be supported by the scatterplot?
   A. As the score for amplitude increases, the score for rotations tends to increase.
   B. As the score for amplitude increases, the score for rotations tends to decrease.
   C. As the score for rotations increases, the score for amplitude tends to decrease.
   D. The score for rotations tends to be the same as the score for amplitude.

2. Which relationship, when graphed on a scatterplot, would NOT be described as having a positive trend?
   A. The number of fans in a football stadium compared to the noise level of the stadium.
   B. The amount of money earned babysitting compared to the number of hours spent babysitting.
   C. The number of miles driven compared to the amount of gasoline in the tank.
   D. All of the above relationships have a positive trend.

3. The following scatterplot compares the number of books ordered through the school fund raiser to the number of books that were sold.
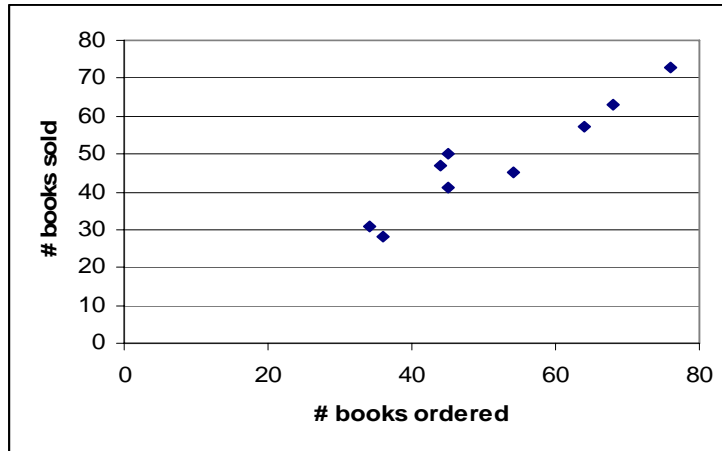
If the mean number of books ordered is about 52, estimate the mean number of books sold based on the trends in data in the scatterplot.

A.   greater than 55
B.   between 50 and 55
C.   between 45 and 50
D.   less than 40

4.   Ms. Smith's class is recording data about an aluminum can recycling project as shown in the scatterplot below.
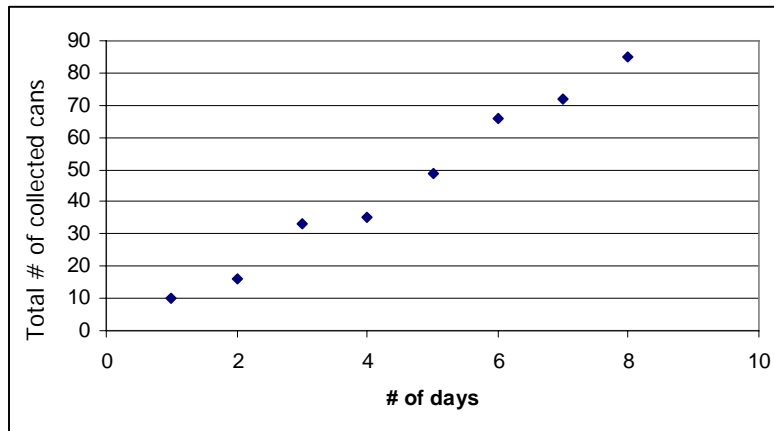
At this rate, about how many days will it take to collect 150 cans?

A.   150 days
B.   20 days
C.   15 days
D.   10 days