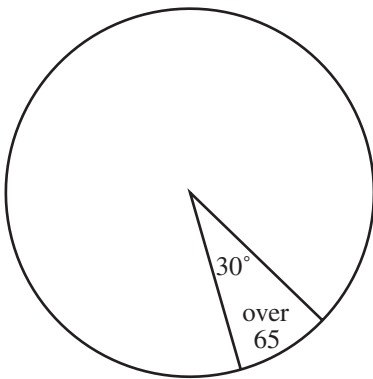
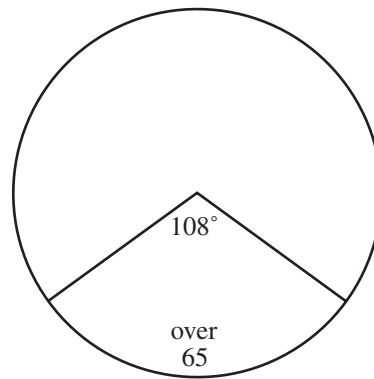


- 29 Amy drew a circle graph to represent the ages of people who were surveyed for a consumer group. Of those surveyed, 30% were over the age of 65. Which one of the following graphs best represents the survey results?

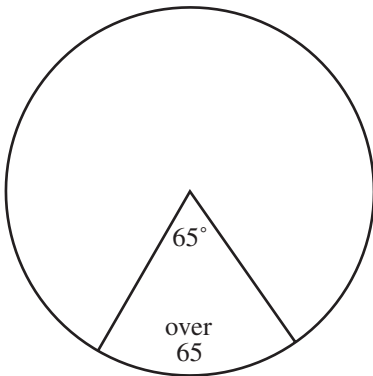
A.



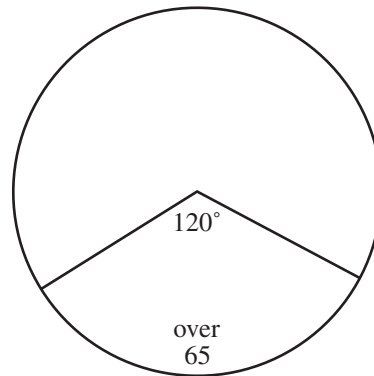
C.



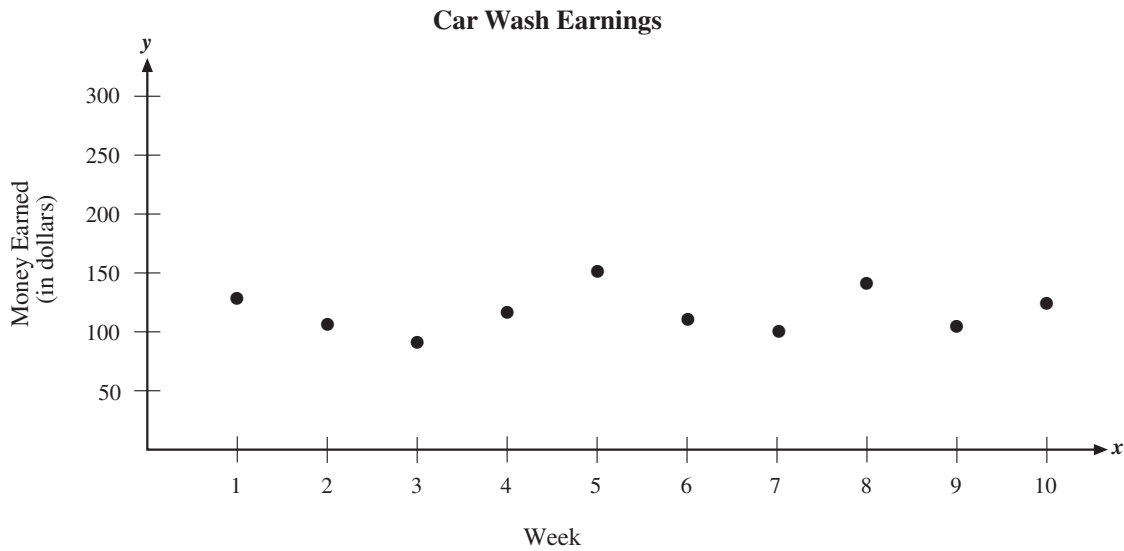
B.



D.



- 30 The students at Albemarle High held a car wash each week for 10 weeks to earn money for the student council. The students made the scatter plot below to represent the amount of the money they earned each week.



Which of the following equations **best** represents the line of best fit for these data?

- A. $y = 110$
- B. $y = 110x$
- C. $y = x + 55$
- D. $y = -x + 55$

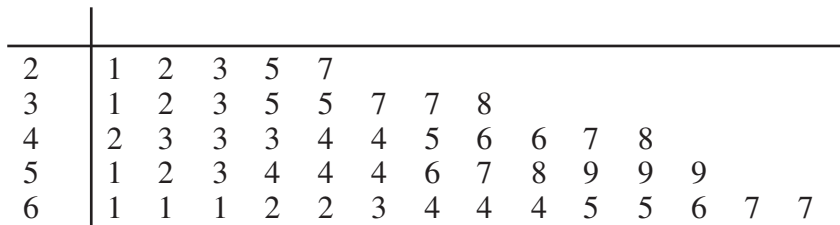
Question 31 is an open-response question.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.**
- **Show all your work (diagrams, tables, or computations).**
- **If you do the work in your head, explain in writing how you did the work.**

- 31** An art collector paid \$7,000 for two paintings, a portrait and a landscape, at the same auction. Each painting cost \$3,500.
- The collector predicts that the portrait will increase in value by \$600 per year. If she is correct, how many years after the date of purchase will the value of the portrait painting first be at least twice its original cost? Show or explain how you obtained your answer.
 - Two years after the date of purchase, the portrait was appraised at \$4900. What was the percent of increase from the collector's purchase price to the appraised value? Show or explain how you obtained your answer.
 - The collector predicts that the value of the landscape painting will increase by 15% per year. If she is correct, what will its value be one year after the date of purchase? Show or explain how you obtained your answer.
 - Assume that the landscape painting continues to increase in value according to the collector's prediction. How many years from the date of purchase will its value first be twice its original cost? Show or explain how you obtained your answer.

- 32 The stem-and-leaf plot below shows the ages of 50 teachers in the Bernard Township school system.

Ages of 50 Teachers in the Bernard Township School System



Key
$6 1 = 61$

Based on the stem-and-leaf plot, what percent of the teachers are over 50 years of age?

- A. 26%
- B. 47%
- C. 51%
- D. 52%