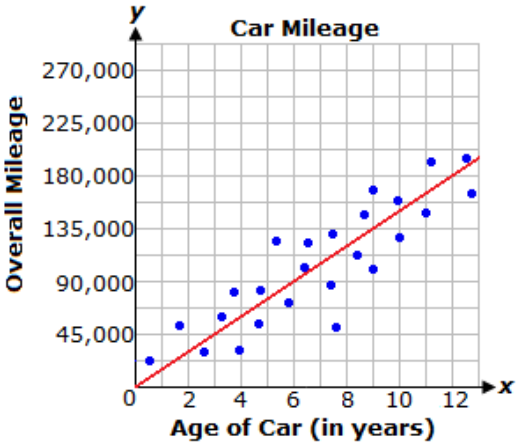
Name:_____ **Line of Best Fit**

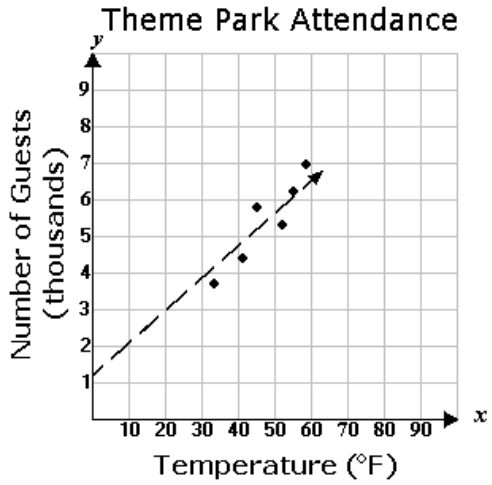
1. The graph below shows a line of best fit for data collected on the age of a car and the overall mileage of the car.



Based on the line of best fit, what is the mileage of a 12-year-old car?

- **A.** 225,000 miles
- **B.** 180,000 miles
- **C.** 90,000 miles
- **D.** 112,500 miles

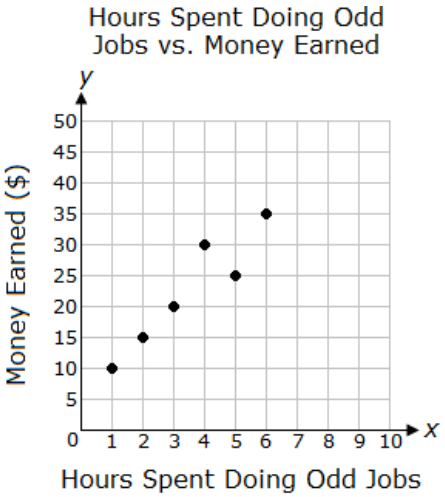
2. A small theme park is trying to determine the number of guests they should expect on a weekend, based on the temperature outside.



Based on the trend line, about how many guests should be expected if the temperature is around 90°?

- **A.** 9,900
- **B.** 9,200
- **C.** 9
- **D.** 8,200

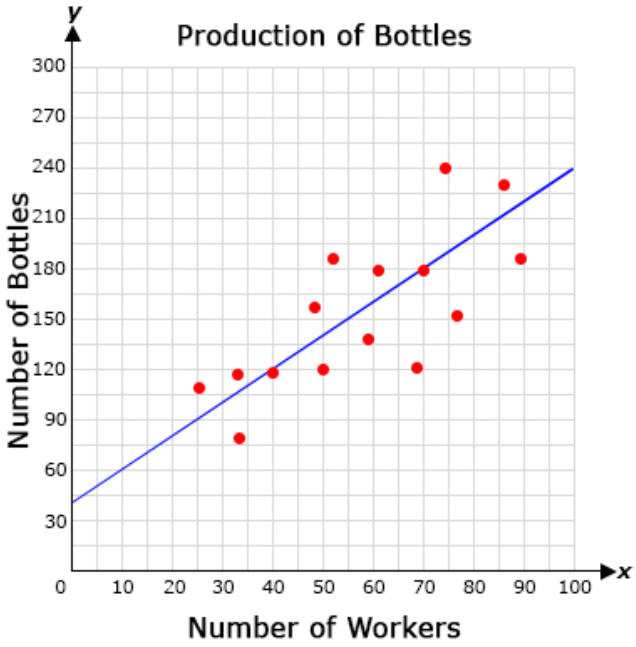
3. George records the number of hours he spends doing odd jobs around the neighborhood and the amount of money he earns each weekend .



Predict the approximate amount of money George would earn if he spends 7 hours doing odd jobs.

- **A.** $25
- **B.** $45
- **C.** $55
- **D.** $40

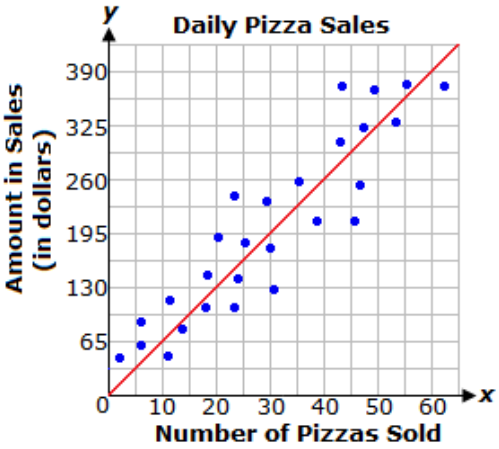
4. The graph below shows a scatter plot of the rate of production in a bottle factory, relating the number of bottles produced to the number of workers working that day. A line of best fit has been drawn within the data.



Based on the line of best fit, what is the number of workers required to manufacture 300 bottles in a day?

- **A.** 150 workers
- **B.** 130 workers
- **C.** 180 workers
- **D.** 25 weeks

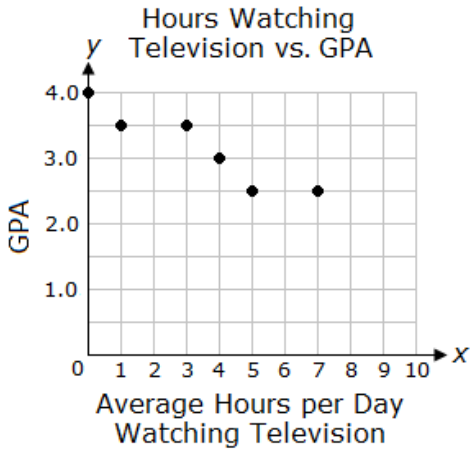
5. The graph below shows a line of best fit for data collected on the number of medium pizzas sold at local pizza shops and the amount of money earned in sales.



Based on the line of best fit, how many pizzas were sold if $325.00 was earned in sales?

- **A.** 200
- **B.** 50
- **C.** 100
- **D.** 150

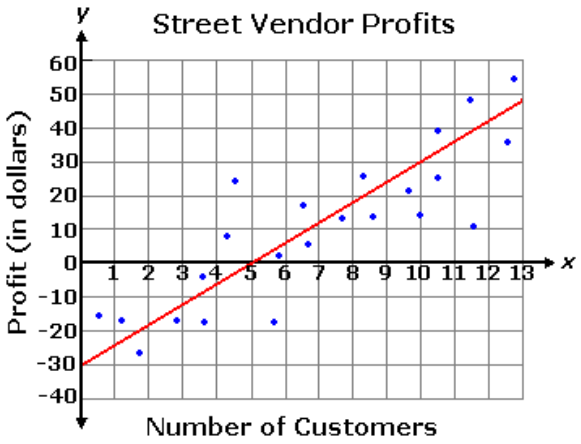
6. A teacher made the following graph showing the average number of hours her students spend watching television per day versus their grade point average, or GPA.



Predict the approximate GPA of a student who watches television for 9 hours, on average, per day.

- **A.** 3.0
- **B.** 2.5
- **C.** 1.0
- **D.** 1.8

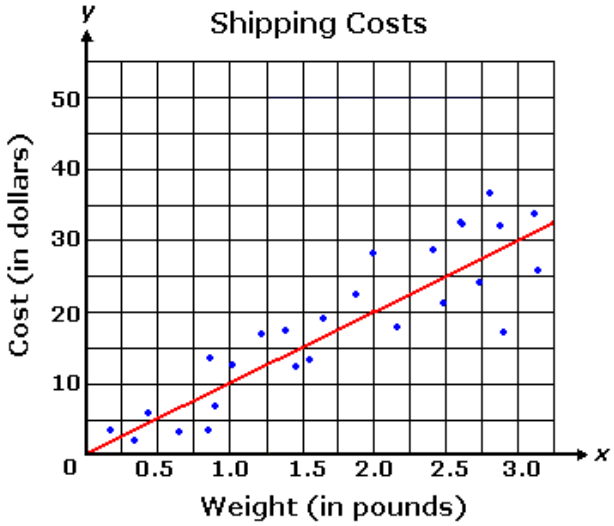
7. The graph below shows a line of best fit for data collected on the daily profits made by street vendors as a function of the number of customers.



Which of the following is the equation of the line of best fit?

- **A.** $y = 6x - 30$
- **B.** $y = \frac{3}{5}x + 5$
- **C.** $y = 6x + 5$
- **D.** $y = \frac{3}{5}x - 30$

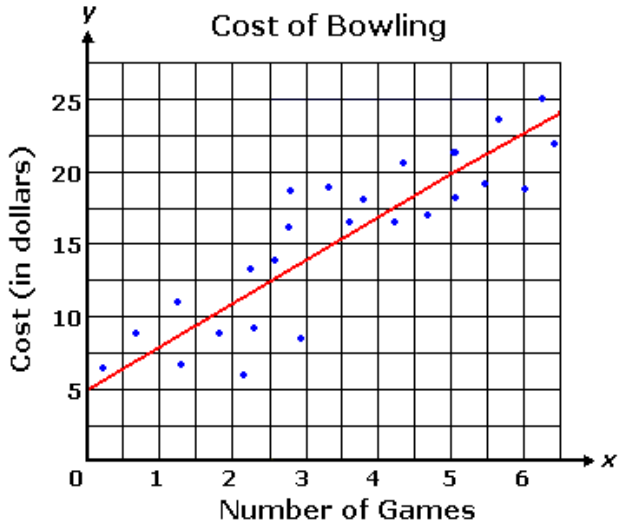
8. The graph below shows a line of best fit for data collected on the cost of shipping a letter or package, with different couriers, as a function of weight.



Which of the following is the equation of the line of best fit?

- **A.** $y = 15x$
- **B.** $y = 10x$
- **C.** $y = \frac{1}{2}x$
- **D.** $y = \frac{2}{5}x$

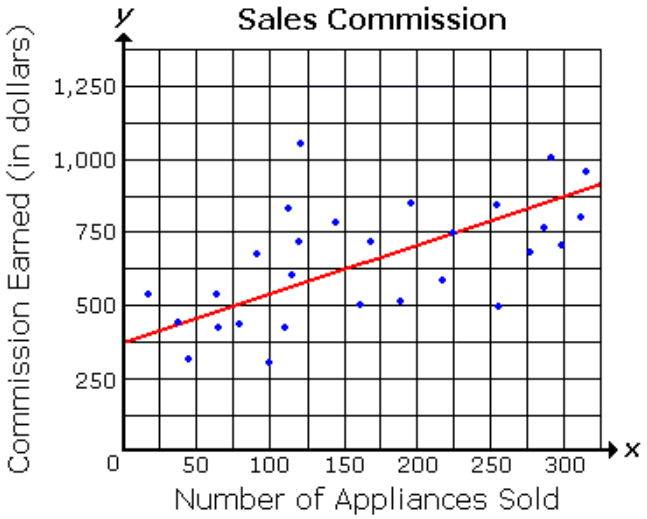
9. The graph below shows a line of best fit for data collected on the cost of bowling as a function of the number of games played.



Which of the following is the equation of the line of best fit?

- **A.** $y = \frac{5}{3}x + 5$
- **B.** $y = \frac{3}{5}x + 5$
- **C.** $y = \frac{3}{2}x + 5$
- **D.** $y = 3x + 5$

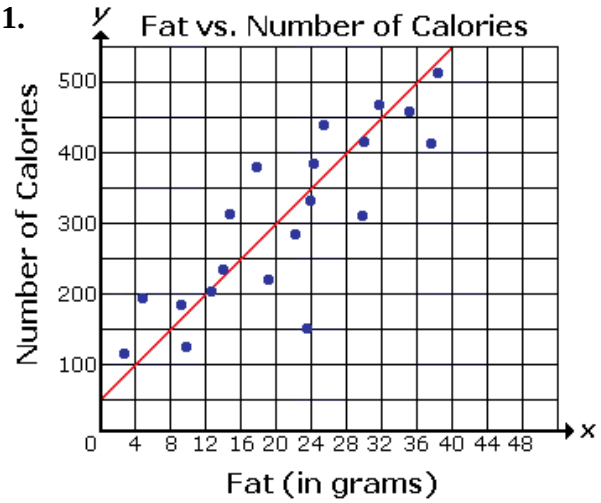
10.



- **A.** $y = \frac{1}{3}x + 475$
- **B.** $y = \frac{5}{3}x + 375$
- **C.** $y = \frac{1}{3}x + 375$
- **D.** $y = \frac{5}{3}x + 475$

The graph above shows a line of best fit for data collected on the sales commission employees earned last month in relation to the number of appliances they sold. What is the equation of the line of best fit?

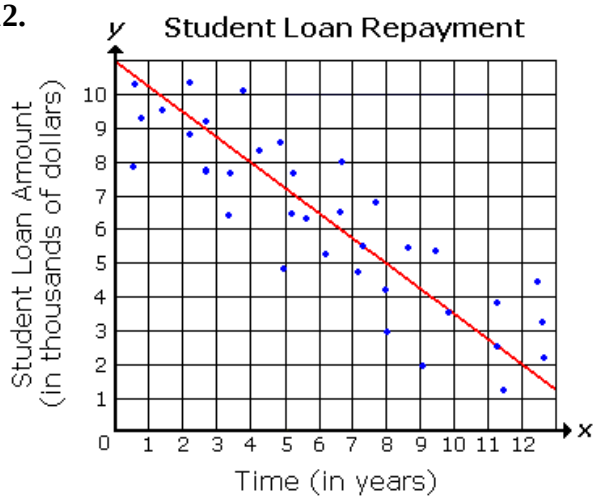
11.



- **A.** $y = \frac{25}{2}x + 50$
- **B.** $y = x + 50$
- **C.** $y = \frac{25}{2}x + 75$
- **D.** $y = x + 75$

The graph above shows a line of best fit for data collected on the number of calories in relation to the grams of fat of different types of food. What is the equation of the line of best fit?

12.



- **A.** $y = -750x + 11{,}000$
- **B.** $y = -\frac{3}{4}x + 11{,}000$
- **C.** $y = -\frac{3}{4}x + 11$
- **D.** $y = -750x + 11$

The graph above shows a line of best fit for data collected on the amount of student loans in relation to the number of years it takes to pay them back. What is the equation of the line of best fit?