Name__

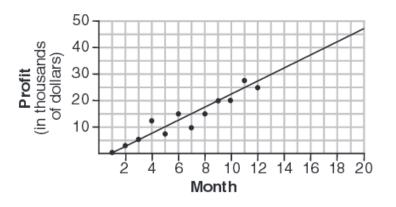
Math 8 Regents

1. The school store did a study comparing the cost of a sweatshirt with the number of sweatshirts sold. The price was changed several times and the numbers of sweatshirts sold were recorded. Their data is shown in the table below. Cost of \$20 \$10 \$25 \$15 \$5 Sweatshirt Number Sold 9 6 15 11 14 Which scatter plot represents the data? Number Sold 20 Number Sold 20 15 С 15 Α 10 10 5 5 15 20 2 5 10 20 5 10 15 25 Cost of Cost of Sweatshirt Sweatshirt (in dollars) (in dollars) 20 20 weatshir in dollars Sweatshir in dollars) D В 15 15 Cost of Cost of 10 10 5 5 5 10 15 20 25 10 15 5 20 Number Sold Number Sold 2. Based on the line of best fit drawn below, which value could be expected for the data in June 2015? 600 А 230 500 Value 400 310 В 300 С 480 200 D 540 100 ٠x June June June June 2000 2005 2010 2015 Year

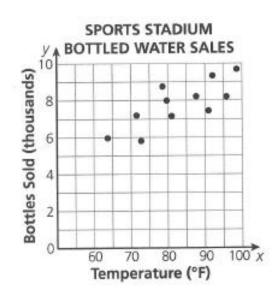
3. The scatter plot below shows the profit, by month, for a new company for the first year of operation. Kate drew a line of best fit, as shown in the diagram.

Using this line, what is the best estimate for profit in the 18th month?

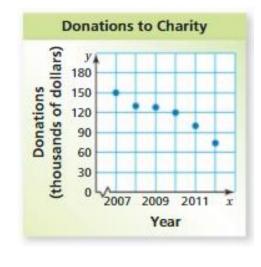
- **A** \$35,000 **C** \$42,500
- **B** \$37,750 **D** \$45,000



4. The scatter plot below shows the relationship between the average temperature at sports stadiums and the number of bottled water sales.



5. The scatter plot below shows the amount of money donated to charity from 2007 to 2012.



Based on the scatter plot, which of the following statements is true?

- **A** As the average temperature increases, the number of bottled waters sold decreases.
- **B** There is a non-linear association between temperature and bottled water sales.
- **C** As the average temperature increases, the number of bottled waters sold increases.
- **D** There is a negative association between temperature and bottled water sales.

Part A Describe the relationship *(correlation)* shown by these data.

Part B How much did the charity receive in 2010?