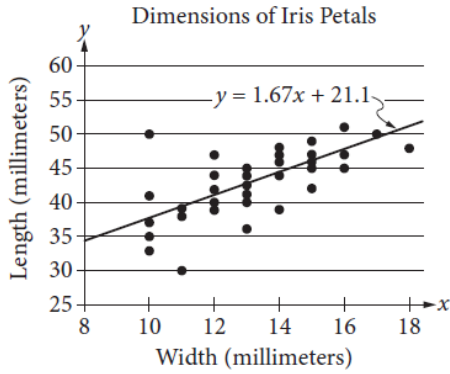


# SAT Practice Questions

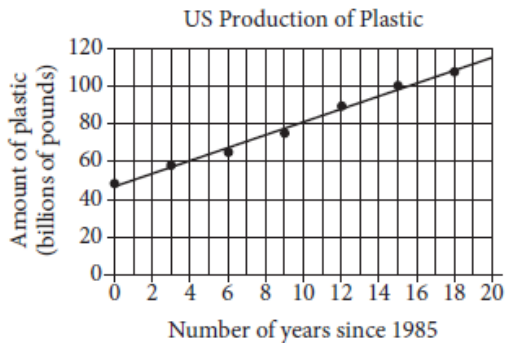
1.



The scatterplot above shows data collected on the lengths and widths of *Iris setosa* petals. A line of best fit for the data is also shown. Based on the line of best fit, if the width of an *Iris setosa* petal is 19 millimeters, what is the predicted length, in millimeters, of the petal?

- A) 21.10
- B) 31.73
- C) 52.83
- D) 55.27

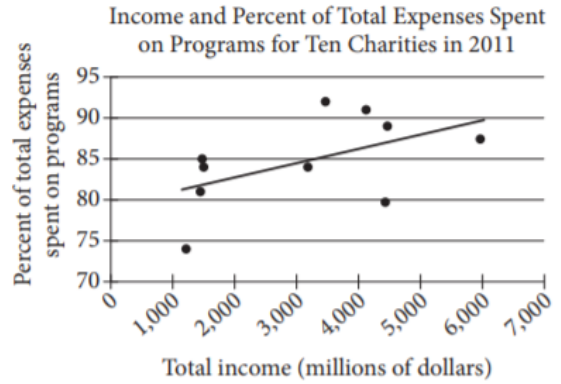
3. Between 1985 and 2003, data were collected every three years on the amount of plastic produced annually in the United States, in billions of pounds. The graph below shows the data and a line of best fit. The equation of the line of best fit is  $y = 3.39x + 46.89$ , where  $x$  is the number of years since 1985 and  $y$  is the amount of plastic produced annually, in billions of pounds.



Which of the following is the best interpretation of the number 3.39 in the context of the problem?

- A) The amount of plastic, in billions of pounds, produced in the United States during the year 1985
- B) The number of years it took the United States to produce 1 billion pounds of plastic
- C) The average annual plastic production, in billions of pounds, in the United States from 1985 to 2003
- D) The average annual increase, in billions of pounds, of plastic produced per year in the United States from 1985 to 2003

2.



The scatterplot above shows data for ten charities along with the line of best fit. For the charity with the greatest percent of total expenses spent on programs, which of the following is closest to the difference of the actual percent and the percent predicted by the line of best fit?

- A) 10%
- B) 7%
- C) 4%
- D) 1%

4.

Number of Adults Contracting Colds

	Cold	No cold	Total
Vitamin C	21	129	150
Sugar pill	33	117	150
Total	54	246	300

The table shows the results of a research study that investigated the therapeutic value of vitamin C in preventing colds. A random sample of 300 adults received either a vitamin C pill or a sugar pill each day during a 2-week period, and the adults reported whether they contracted a cold during that time period. What proportion of adults who received a sugar pill reported contracting a cold?

- A)  $\frac{11}{18}$
- B)  $\frac{11}{50}$
- C)  $\frac{9}{50}$
- D)  $\frac{11}{100}$