

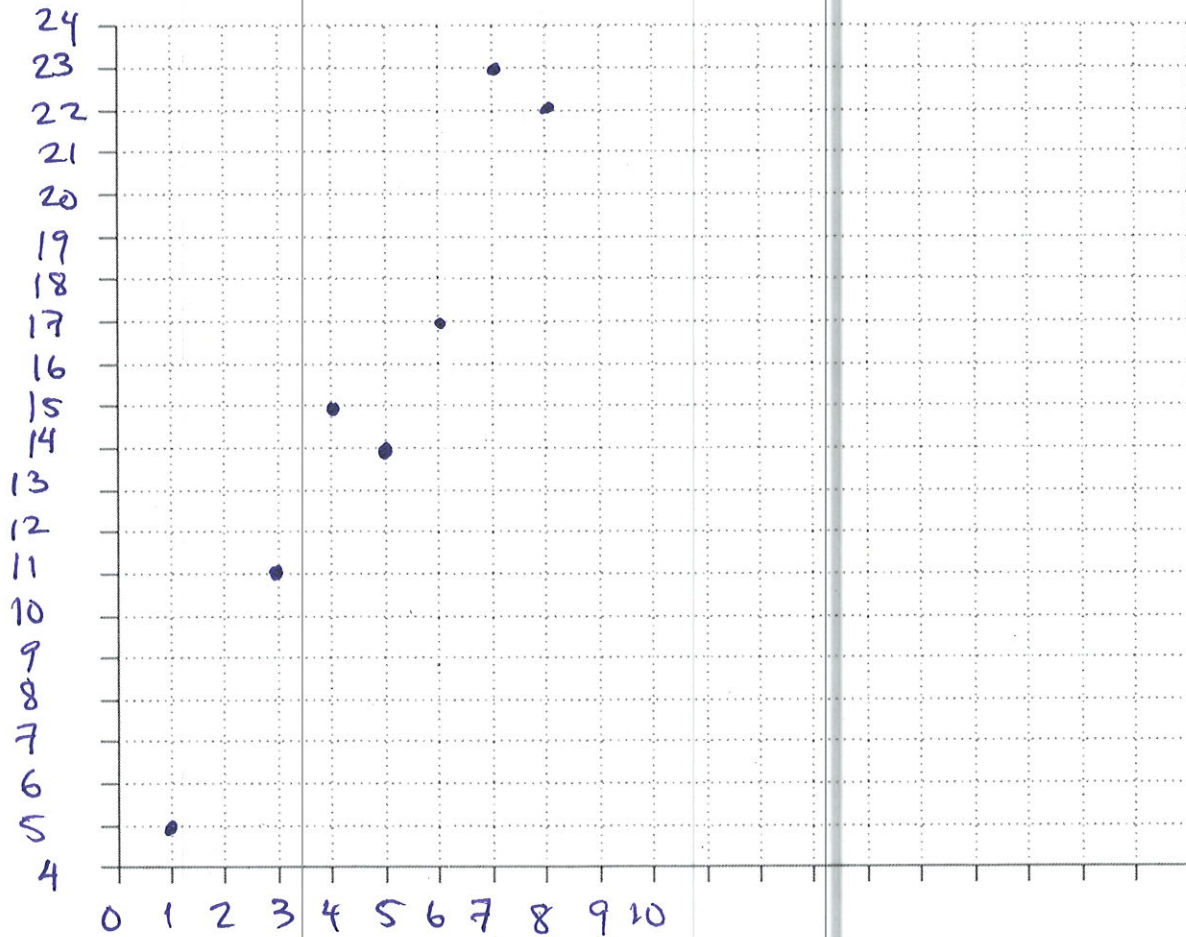
Instructions: Show all work to receive full credit. You should note any formulas used or calculator functions used, their inputs and outputs. I cannot grade work if I don't know where an answer came from. Be sure complete all parts of each questions, including requests for interpretation and explanations. Be as thorough as possible.

1. Data comparing law school study time and test results are shown in the table below.

Table 1. Law School Candidates' Prep Times and Test Scores

Candidate	1	2	3	4	5	6	7	8
Days studied	7	9	5	1	8	4	3	6
Score earned	23	25	14	5	22	15	11	17

- a. Plot the data in a scatterplot on the graph.



2. In 2006, total sales at a company were \$10 million and in 2008, sales were \$14 million. If sales are measured in millions and time in years since 2000, find the slope of the line representing sales figures in a given year.

$$\begin{array}{l} (2006, 10) \\ (2008, 14) \end{array} \text{ or } \begin{array}{l} (6, 10) \\ (8, 14) \end{array}$$

$$\frac{14-10}{2008-2006} = \frac{4}{2} = 2$$

or

$$\frac{14-10}{8-2} = \frac{4}{2} = 2$$

years since 2000

$$10 = 2(6) + b$$

$$10 = 12 + b$$

$$-2 = b$$

$$y = 2x - 2$$

where x is # of years
since 2000.