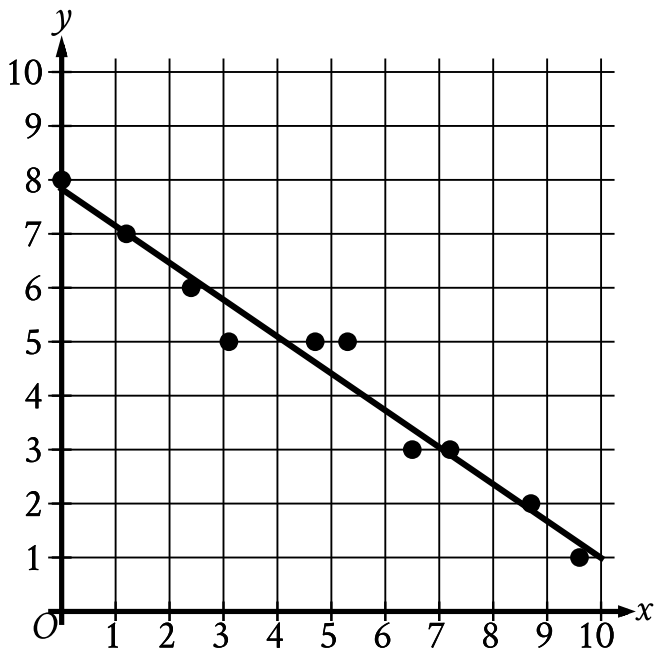
Question ID 796b120b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 796b120b

In the given scatterplot, a line of best fit for the data is shown.



Which of the following is closest to the slope of this line of best fit?

A. 7

B. 0.7

C. -0.7

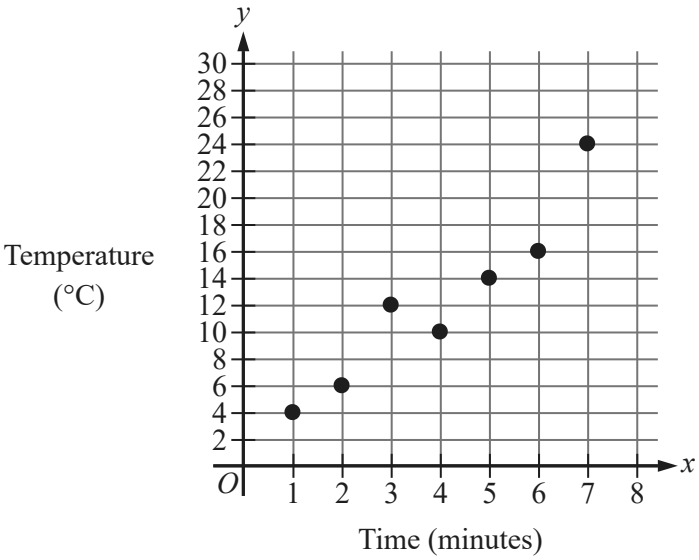
D. -7

Question ID 21661dbf

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 21661dbf

During a study, the temperature, in degrees Celsius (°C), of the air in a chamber was recorded to the nearest integer at certain times. The scatterplot shows the recorded temperature y, in °C, of the air in the chamber x minutes after the start of the study.

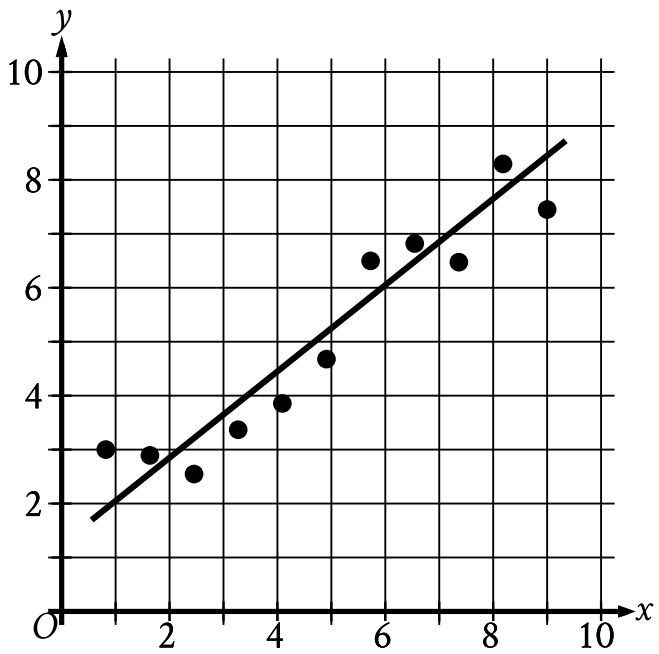


What was the average rate of change, in °C per minute, of the recorded temperature of the air in the chamber from $x = 5$ to $x = 7$?

Question ID fed2d1b1

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: fed2d1b1



The scatterplot shows the relationship between two variables, x and y. A line of best fit is also shown. For how many of the 11 data points does the line of best fit predict a greater y-value than the actual y-value?

Question ID 8bea8625

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 8bea8625

Each year, the value of an investment increases by 0.49% of its value the previous year. Which of the following functions best models how the value of the investment changes over time?

A. Decreasing exponential

B. Decreasing linear

C. Increasing exponential

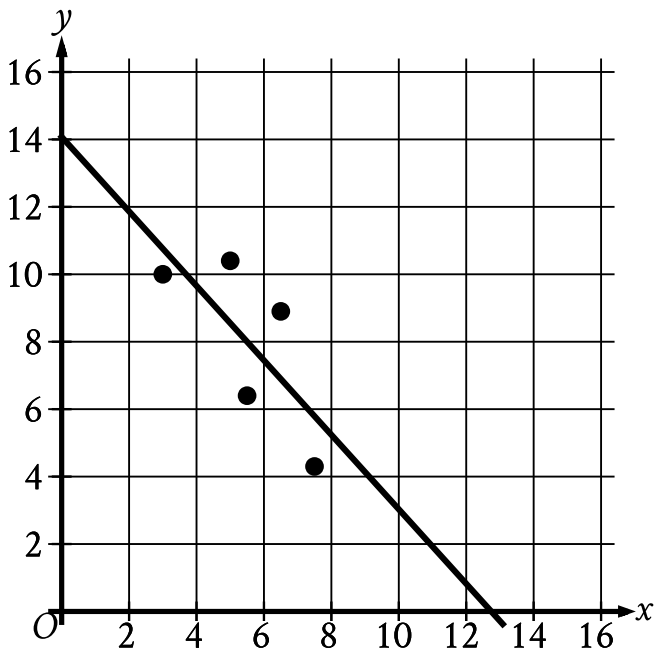
D. Increasing linear

Question ID fc242959

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: fc242959

The scatterplot shows the relationship between two variables, x and y. A line of best fit is also shown.



Which of the following is closest to the slope of this line of best fit?

A. -3.3

B. -1.1

C. 1.1

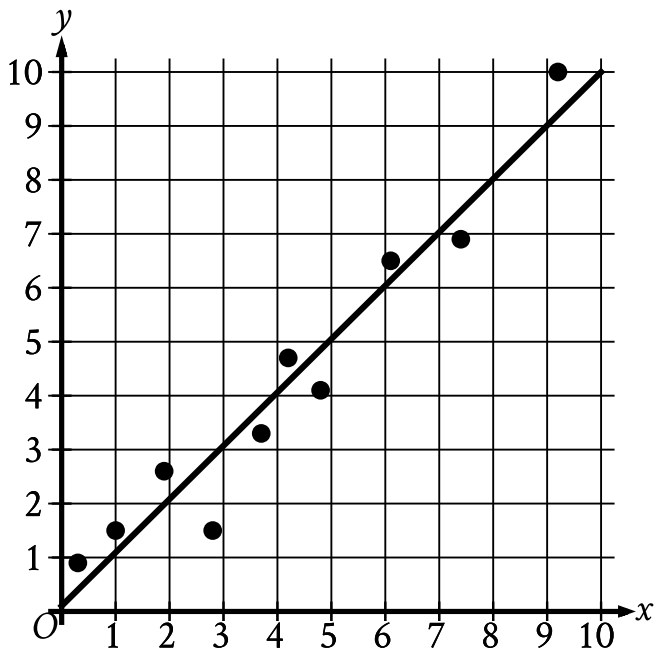
D. 3.3

Question ID f006b049

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: f006b049

The scatterplot shows the relationship between two variables, x and y. A line of best fit for the data is also shown.



For how many of the 10 data points is the actual *y*-value greater than the *y*-value predicted by the line of best fit?

A. 3

B. 4

C. 6

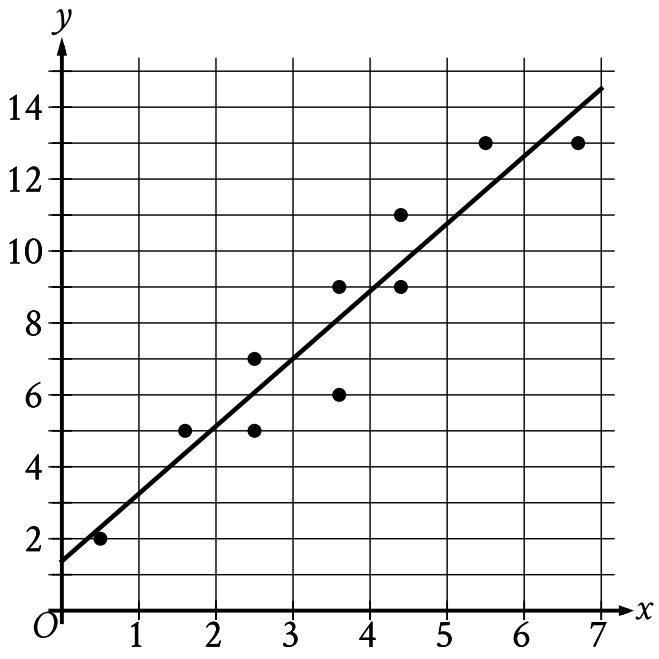
D. 7

Question ID 291206f8

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 291206f8

In the given scatterplot, a line of best fit for the data is shown.



Which of the following is closest to the slope of the line of best fit shown?

A. 0

B. $\frac{1}{2}$

C. 1

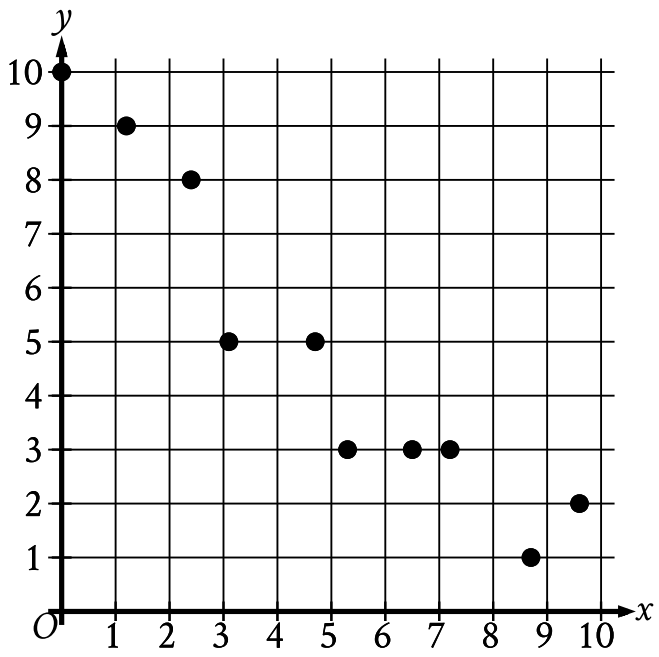
D. 2

Question ID ce1b1751

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: ce1b1751

The scatterplot shows the relationship between two variables, x and y.



Which of the following equations is the most appropriate linear model for the data shown?

A. $y = 0.9 + 9.4x$

B. $y = 0.9 - 9.4x$

C. $y = 9.4 + 0.9x$

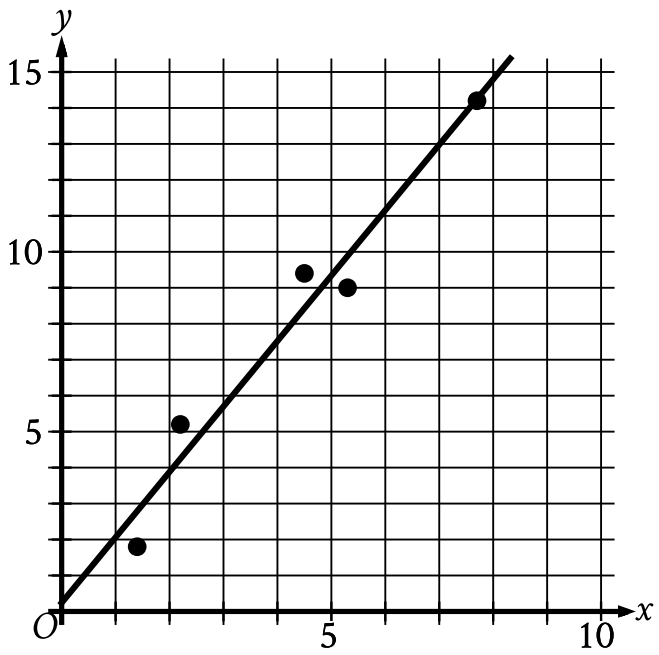
D. $y = 9.4 - 0.9x$

Question ID bc79626c

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: bc79626c

In the given scatterplot, a line of best fit for the data is shown.



Which of the following is closest to the slope of the line of best fit shown?

A. 0.2

B. 0.7

C. 1.8

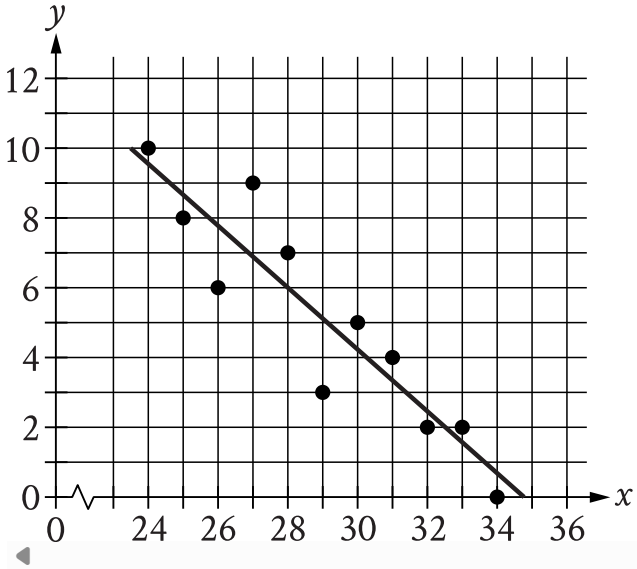
D. 2.6

Question ID b160d8c8

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: b160d8c8

The scatterplot shows the relationship between two variables, x and y. A line of best fit for the data is also shown.



At $x = 25.5$, which of the following is closest to the *y*-value predicted by the line of best fit?

A. 6.2

B. 7.3

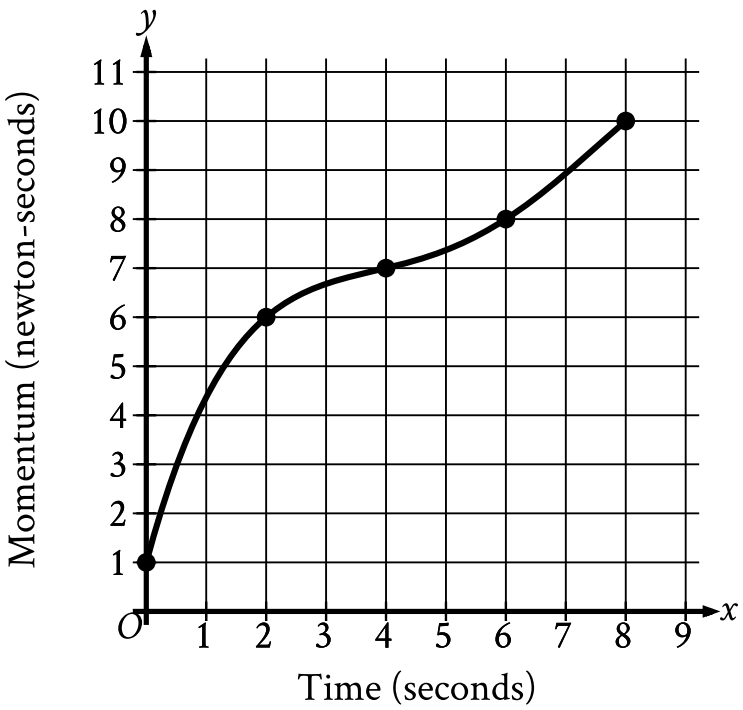
C. 8.2

D. 9.1

Question ID b65a5036

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: b65a5036



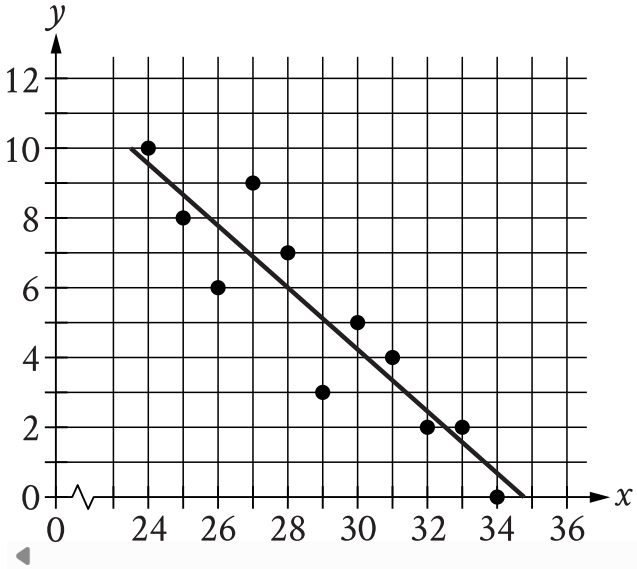
The graph shows the momentum y, in newton-seconds, of an object x seconds after the object started moving, for $0 \leq x \leq 8$. What is the average rate of change, in newton-seconds per second, in the momentum of the object from $x = 2$ to $x = 6$?

Question ID 4f783906

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 4f783906

The scatterplot shows the relationship between two variables, x and y. A line of best fit for the data is also shown.



At $x = 32$, which of the following is closest to the y-value predicted by the line of best fit?

A. 0.4

B. 1.5

C. 2.4

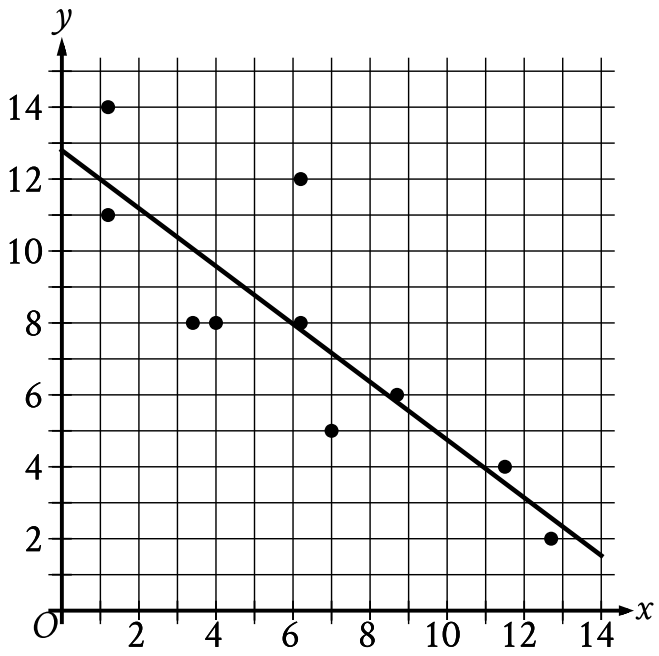
D. 3.3

Question ID 845c6478

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 845c6478

The scatterplot shows the relationship between two variables, x and y. A line of best fit is also shown.



Which of the following is closest to the slope of the line of best fit shown?

A. -2.4

B. -0.8

C. 0.8

D. 2.4