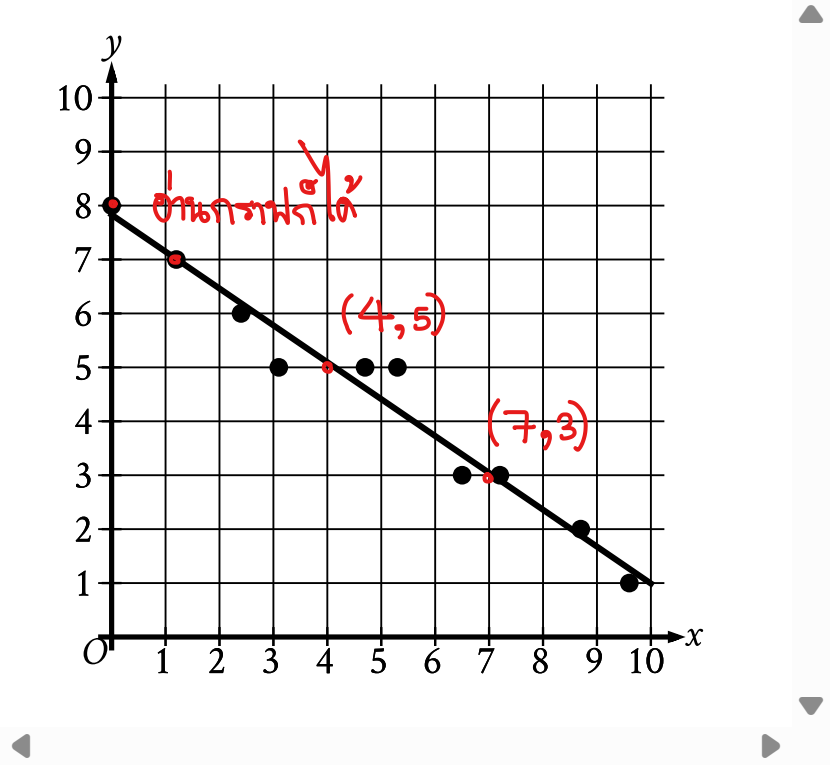


Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium

ID: 796b120b

หัวข้อ Topic 1

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

Slope (-) = $\frac{5 - 3}{4 - 7}$
 $= -0.6667$
 $\approx -0.7 //$

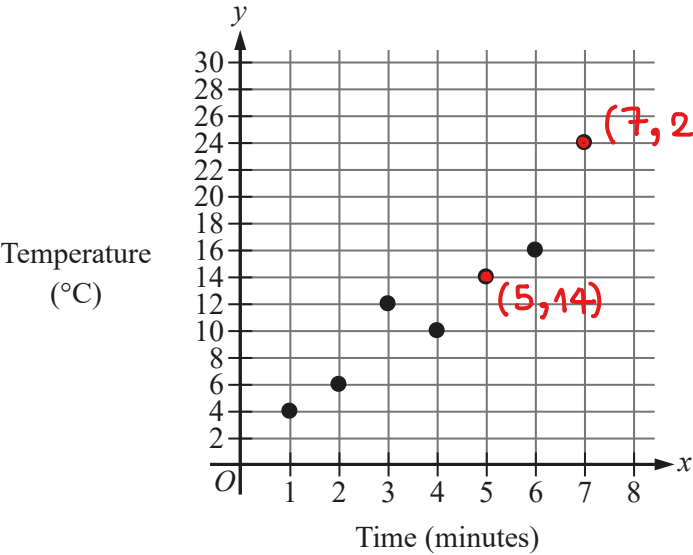
Question ID 21661dbf

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

ID: 21661dbf

หัวข้อ Topic 1

During a study, the temperature, **in degrees Celsius ($^{\circ}\text{C}$)**, of the air in a chamber was recorded to the nearest integer at certain times. The scatterplot shows the recorded temperature **y , in $^{\circ}\text{C}$** , of the air in the chamber **x minutes** after the start of the study.



What was the average rate of change, **in $^{\circ}\text{C}$ per minute**, of the recorded temperature of the air in the chamber from $x = 5$ to $x = 7$?

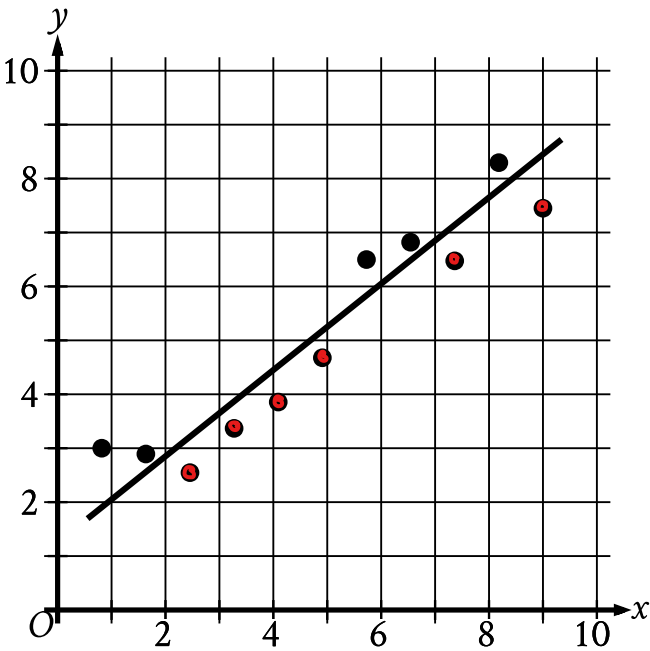
slope

$$\begin{aligned} \text{Slope} &= \frac{24 - 14}{7 - 5} \\ &= 5 // \end{aligned}$$

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?

/
ที่ X เดียวกัน
6 //

Question ID 8bea8625

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

ID: 8bea8625

หน่วย Topic 2

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?

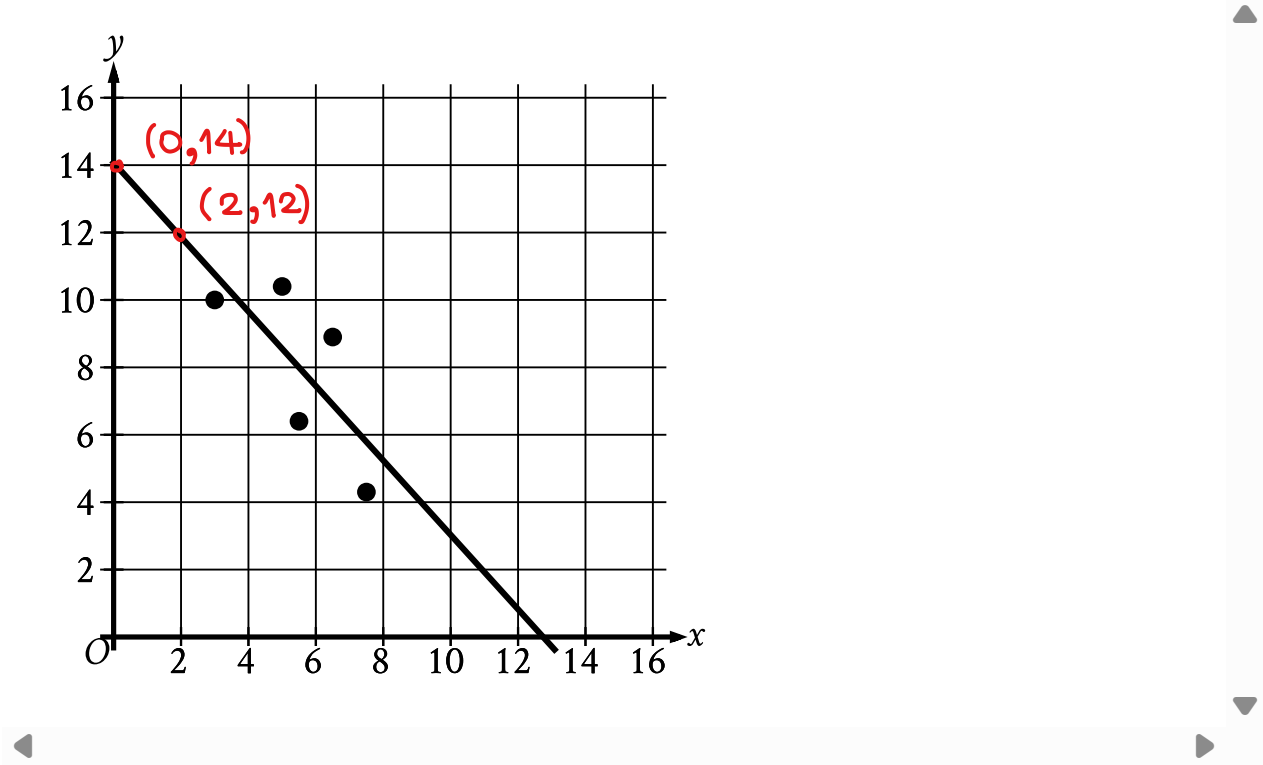
- ~~A. Decreasing exponential~~
- ~~B. Decreasing linear~~
- ~~C. Increasing exponential~~
- ~~D. Increasing linear~~

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~~

Slope $(-)$ = $\frac{14 - 12}{0 - 2}$
 $= -1$
 $\approx -1.1 //$

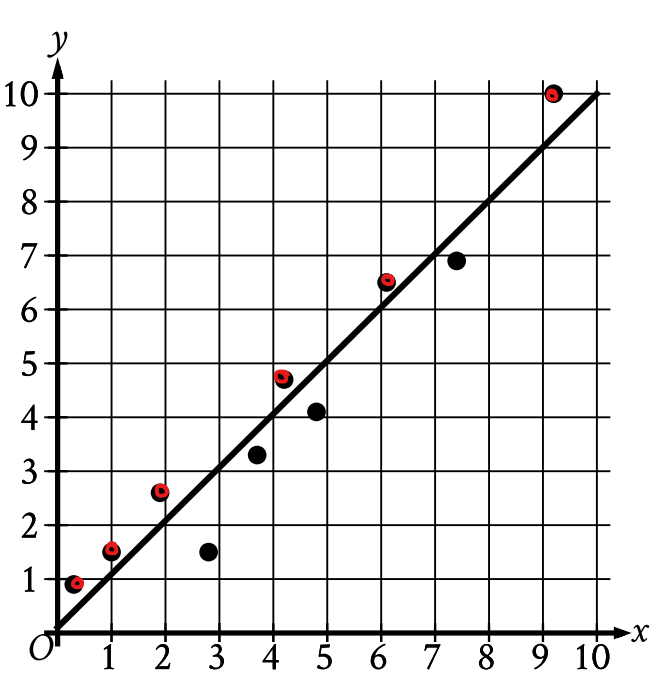
Question ID f006b049

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

ที่ X เดียวกัน

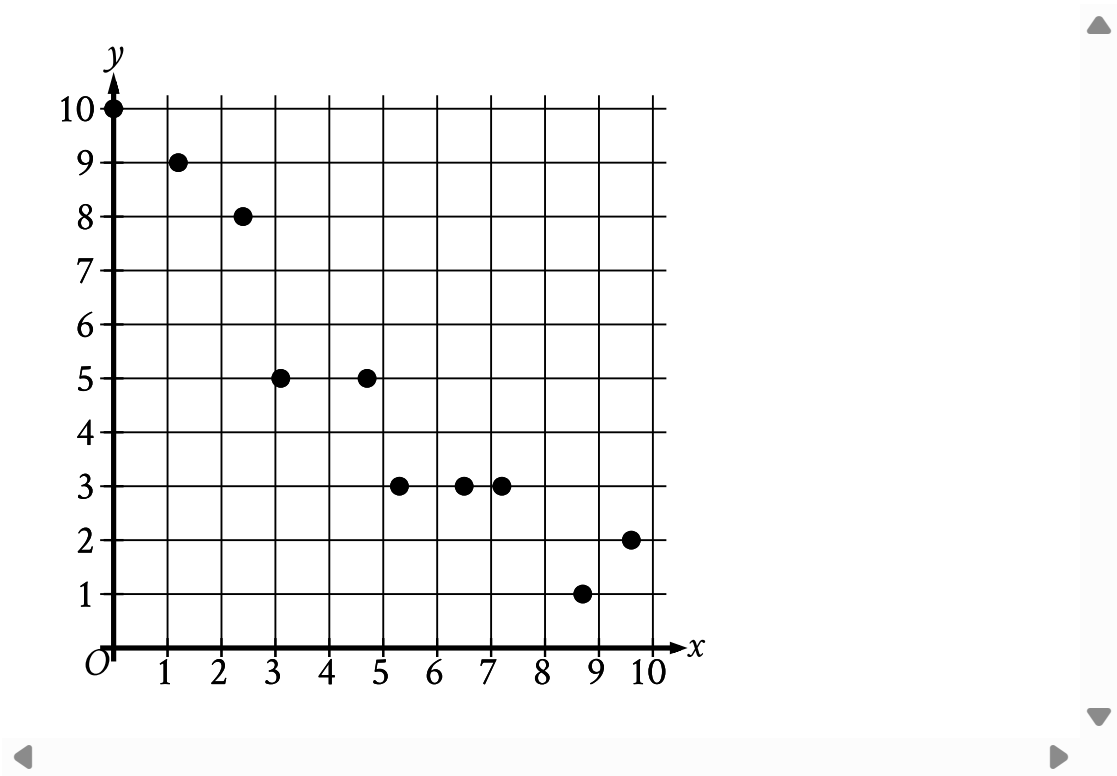
Question ID ce1b1751

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

ID: ce1b1751

Wrong! Topic 1

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. ~~$y = 9.4 - 0.9x$~~

Slope (-)
Y-intercept ≈ 10 //

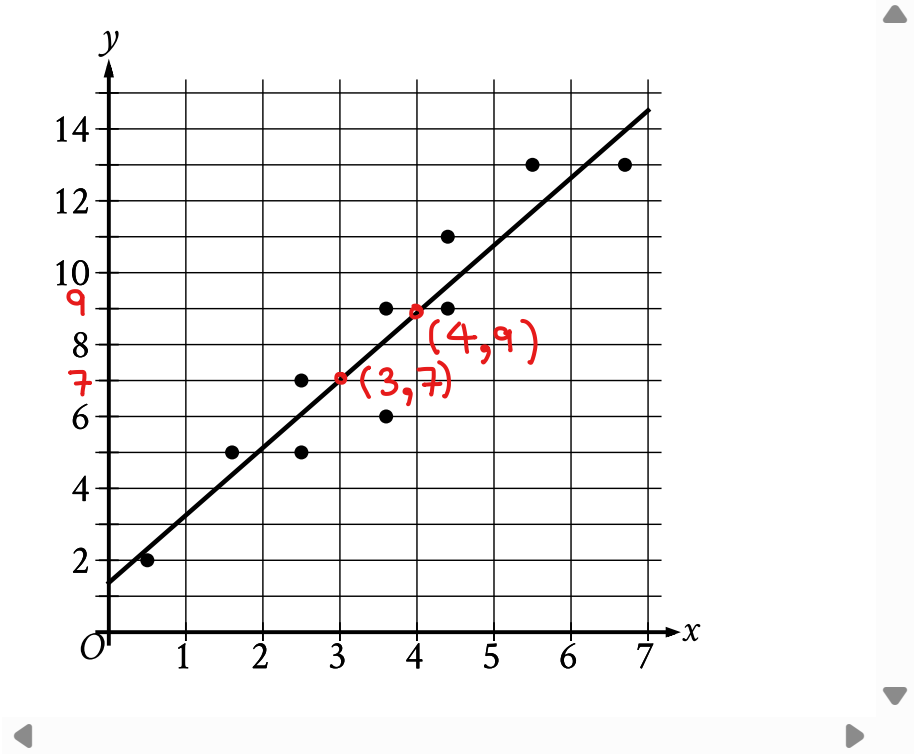
Question ID 291206f8

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

ID: 291206f8

หัวข้อ Topic 1

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~~

อ่านกราฟจากมาก ไปน้อย
Slope (+) = $\frac{9 - 7}{4 - 3}$
= 2 //

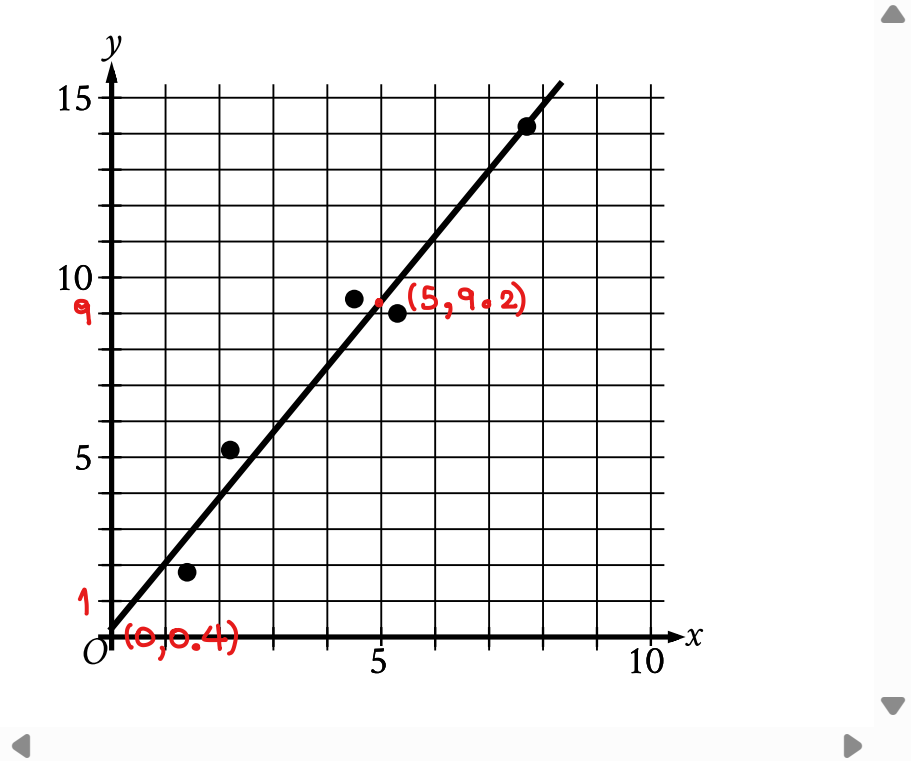
Question ID bc79626c

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

ID: bc79626c

หัวข้อ Topic 1

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

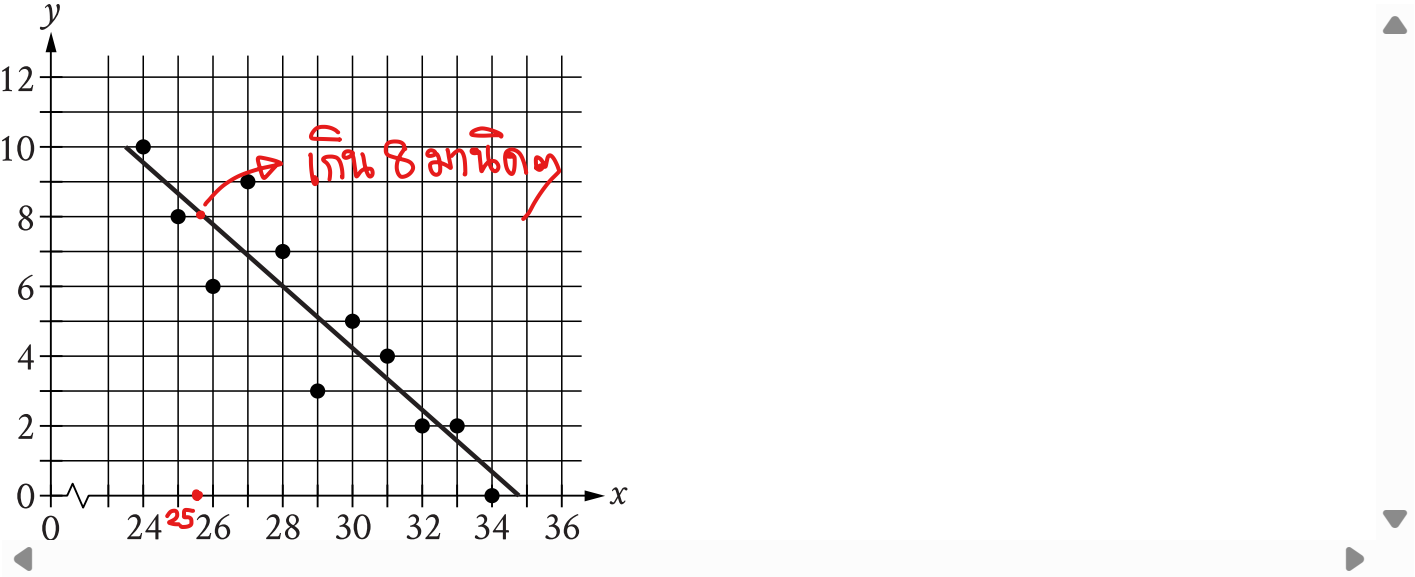
Slope (+) = $\frac{9.2 - 0.4}{5 - 0}$
 $= 1.76$
 $\approx 1.8 //$

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?

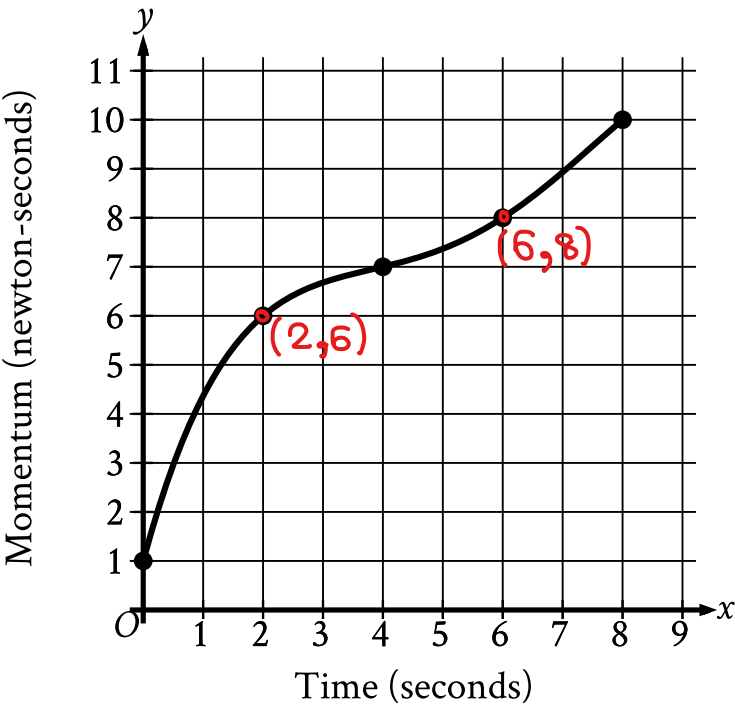
- A. 6.2
- B. 7.3
- ~~C. 8.2~~
- D. 9.1

Question ID b65a5036

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

ID: b65a5036

หัวข้อ Topic 1



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 $x = 6$?

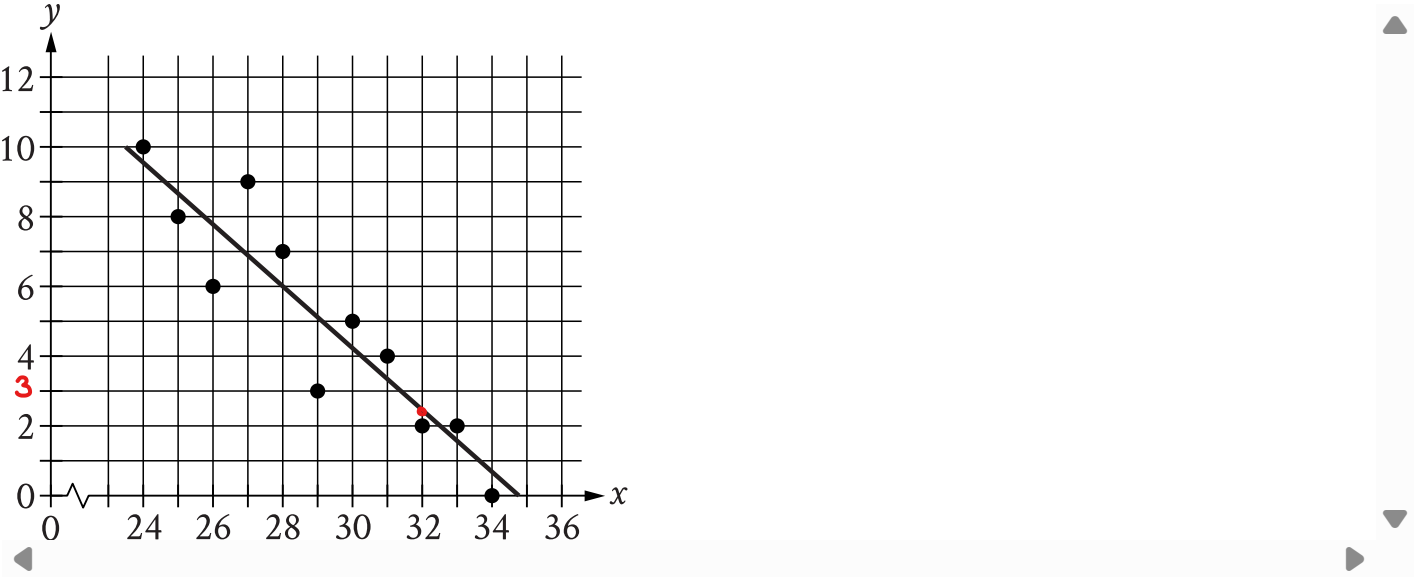
Slope = $\frac{8 - 6}{6 - 2}$
 $= 0.5 //$

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

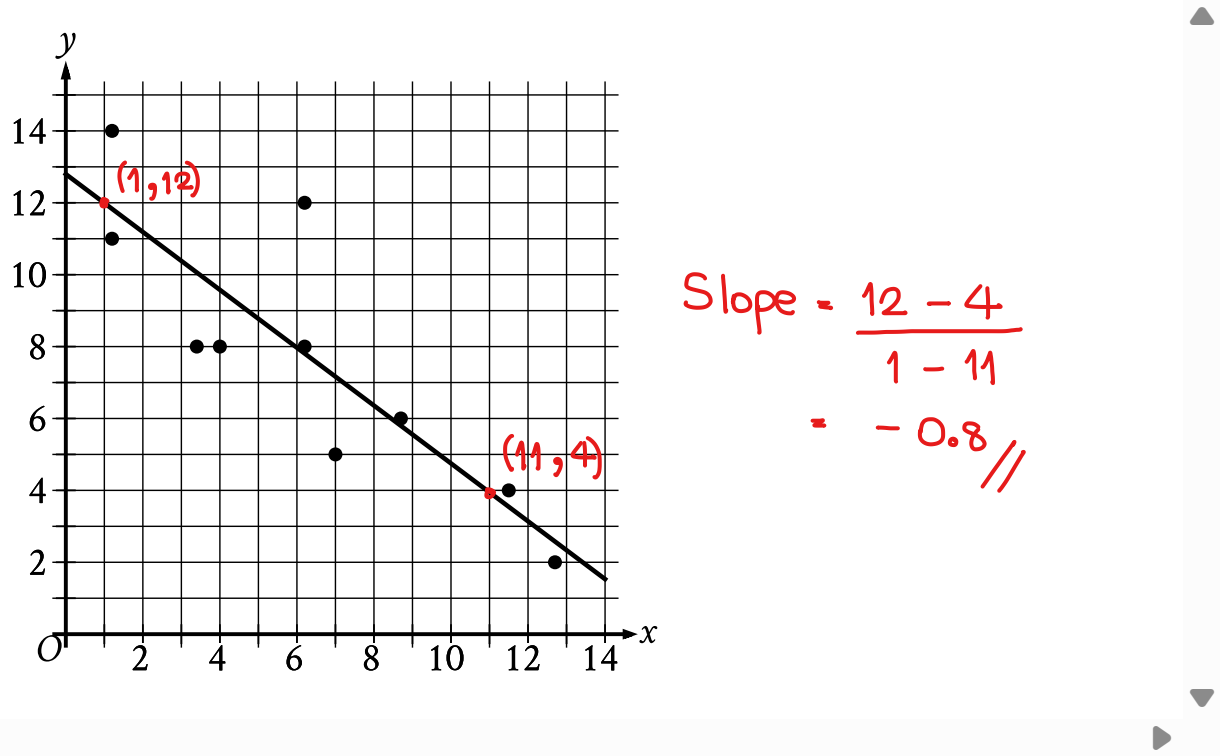
Question ID 845c6478

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

ID: 845c6478

หัวข้อ Topic 1

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