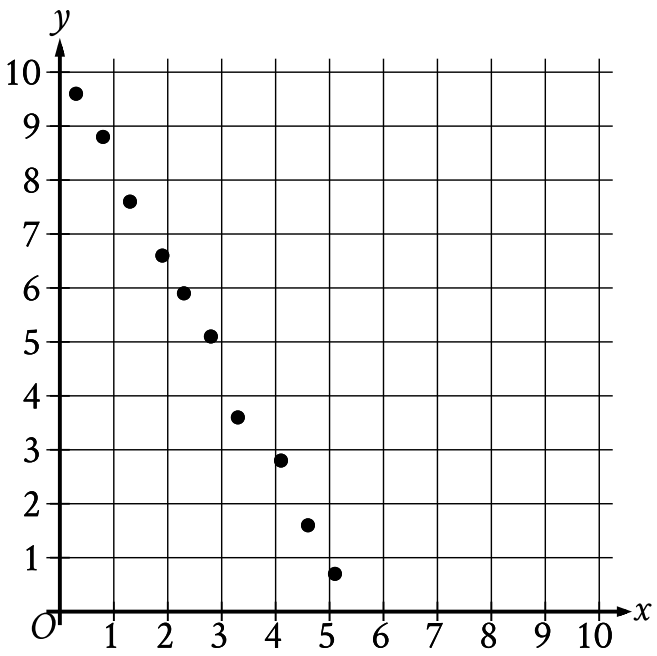
Question ID a6541d64

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

ID: a6541d64



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

A. $y = -1.9x - 10.1$

B. $y = -1.9x + 10.1$

C. $y = 1.9x - 10.1$

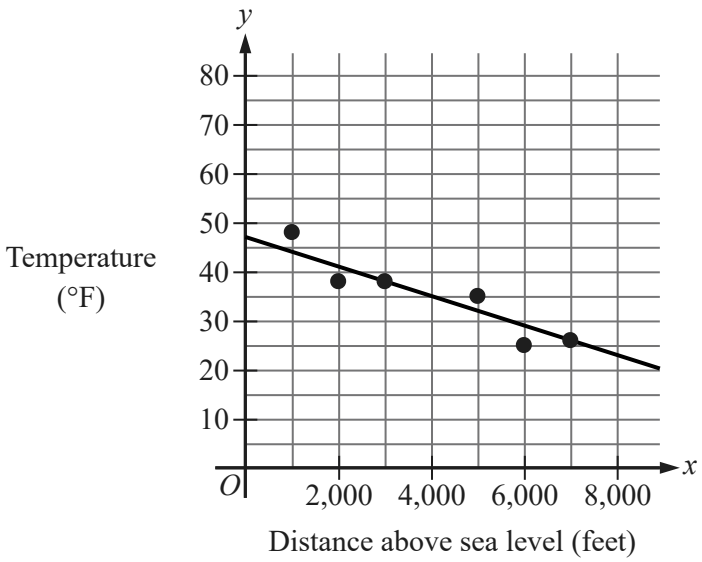
D. $y = 1.9x + 10.1$

Question ID 3349bc95

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

ID: 3349bc95

The scatterplot shows the temperature, in degrees Fahrenheit ($^\circ$F), and the distance above sea level, in feet, measured at 6 locations on Mount Jefferson. A line of best fit is also shown.



At a distance of 4,000 feet above sea level, what is the temperature, in $^\circ$F, predicted by the line of best fit?

A. 47

B. 35

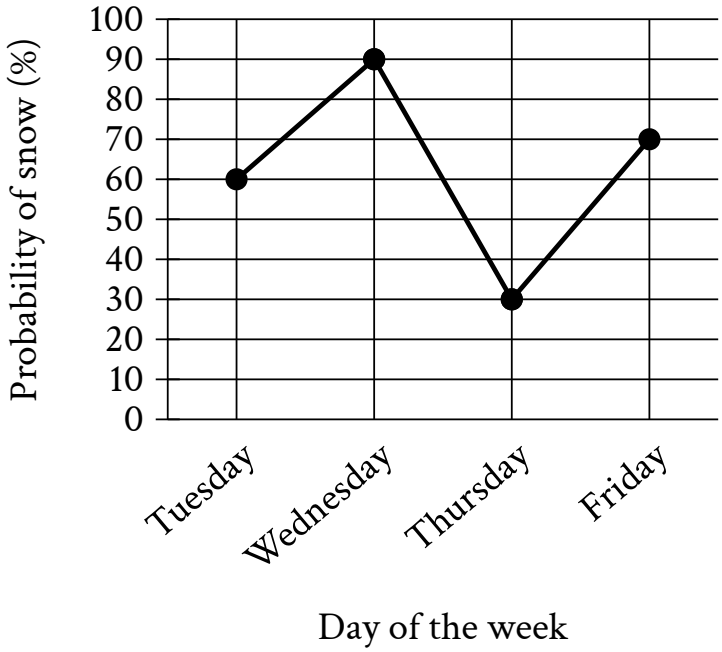
C. 25

D. 0

Question ID 9a3472d0

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

ID: 9a3472d0



The line graph shows the probability of snow, as a percent, at a certain location for each day during a four-day period. According to the line graph, for which day during this four-day period is the probability of snow 30%?

A. Tuesday

B. Wednesday

C. Thursday

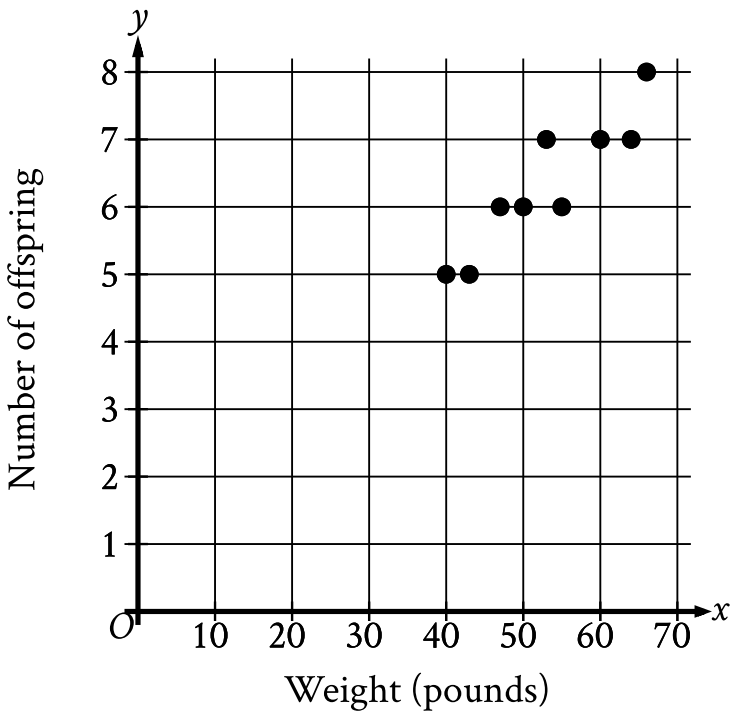
D. Friday

Question ID 426d1e38

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

ID: 426d1e38

The scatterplot shows the relationship between the weight, in pounds, of each of 9 female gray wolves on April 30 and the number of offspring each gray wolf produced.



How many offspring did the 50-pound gray wolf produce?

A. 8

B. 7

C. 6

D. 5

Question ID ddb43390

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

ID: ddb43390

The table shows selected values from function f.

x	$f(x)$
-1	16
0	17
1	18
2	19

Which of the following is the best description of function f?

A. Decreasing linear

B. Increasing linear

C. Decreasing exponential

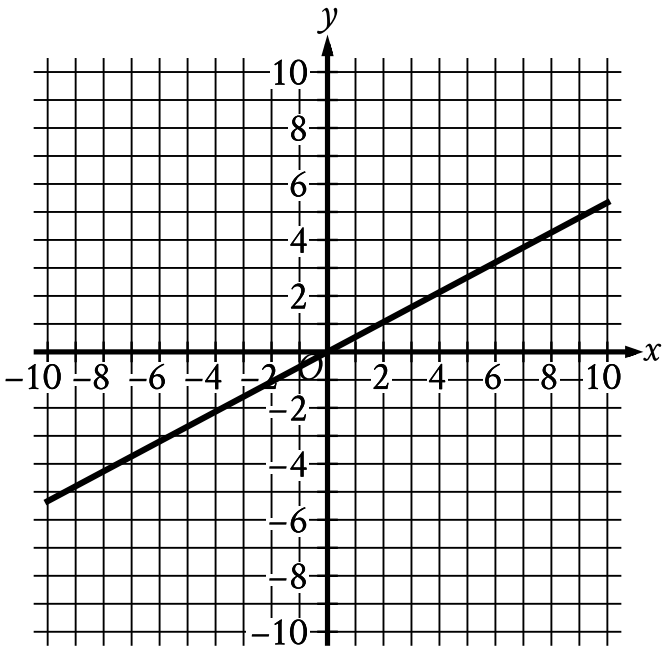
D. Increasing exponential

Question ID 0449a9d0

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

ID: 0449a9d0

The graph of function f is shown, where $y = f(x)$.



Which of the following describes function f?

A. Increasing linear

B. Decreasing linear

C. Increasing exponential

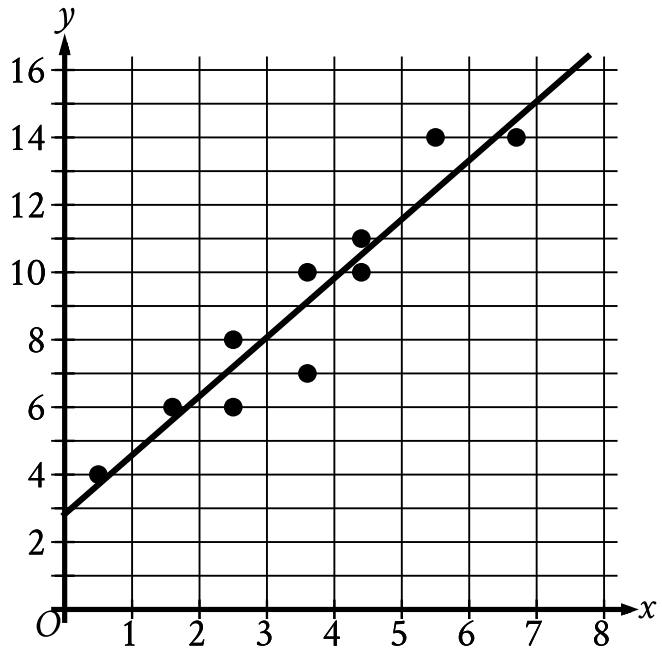
D. Decreasing exponential

Question ID ce544c96

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

ID: ce544c96

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



Which of the following equations best represents the line of best fit shown?

A. $y = 2.8 + 1.7x$

B. $y = 2.8 - 1.7x$

C. $y = -2.8 + 1.7x$

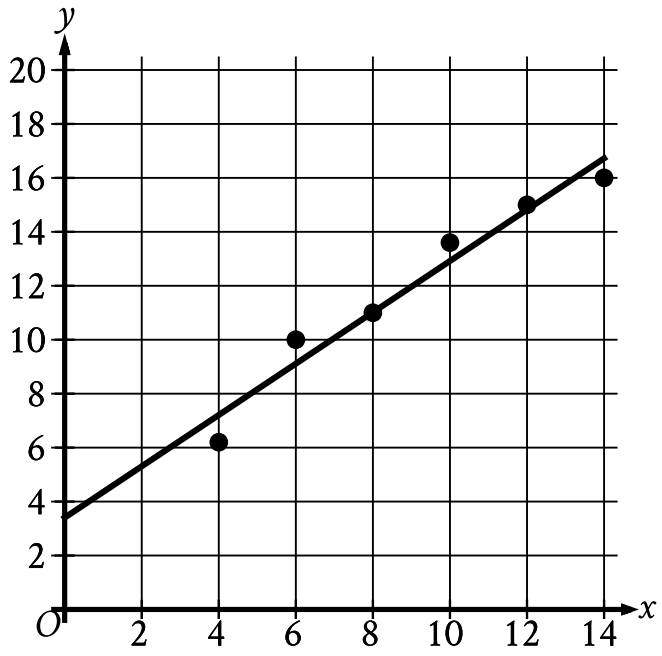
D. $y = -2.8 - 1.7x$

Question ID b2b843b0

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

ID: b2b843b0

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



Which of the following equations best represents the line of best fit shown?

A. $y = x + 3.4$

B. $y = x - 3.4$

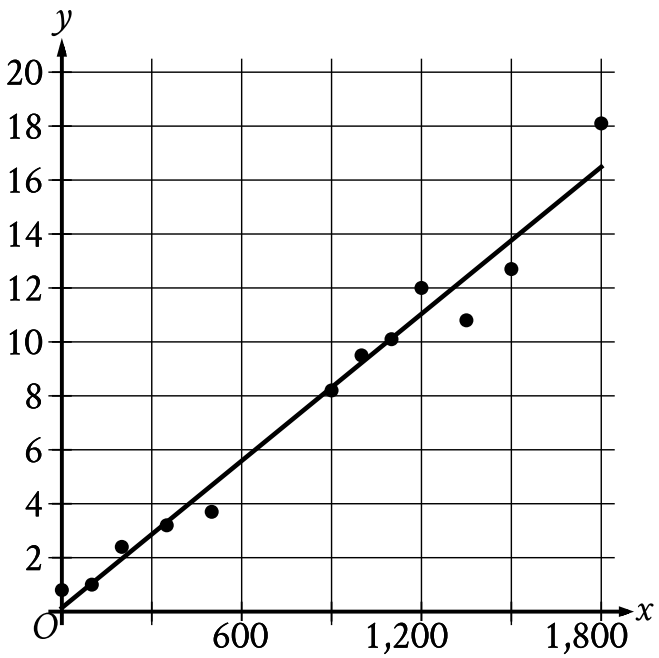
C. $y = -x + 3.4$

D. $y = -x - 3.4$

Question ID 9073e2c4

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

ID: 9073e2c4



Twelve data points are shown in the scatterplot. A line of best fit for the data is also shown. At $x = 1{,}200$, which of the following is closest to the *y*-value predicted by the line of best fit?

A. 16

B. 14

C. 11

D. 6

Question ID 44c4426d

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

ID: 44c4426d

An airplane descends from an altitude of $9{,}500$ feet to $5{,}000$ feet at a constant rate of 400 feet per minute. What type of function best models the relationship between the descending airplane's altitude and time?

A. Decreasing exponential

B. Decreasing linear

C. Increasing exponential

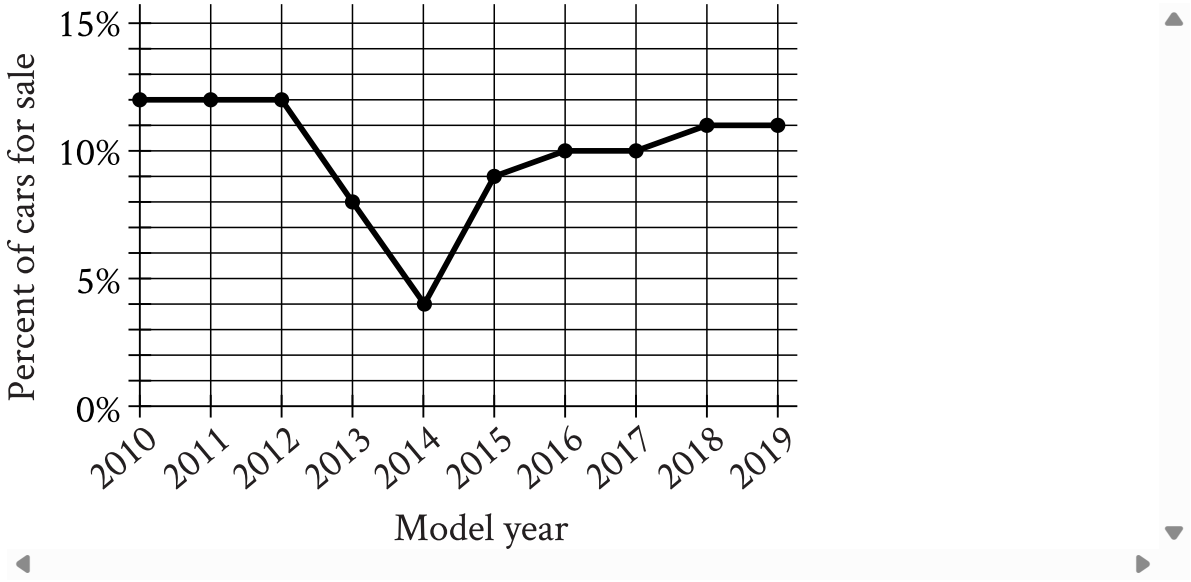
D. Increasing linear

Question ID bcae826d

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

ID: bcae826d

The line graph shows the percent of cars for sale at a used car lot on a given day by model year.



For what model year is the percent of cars for sale the smallest?

A. 2012

B. 2013

C. 2014

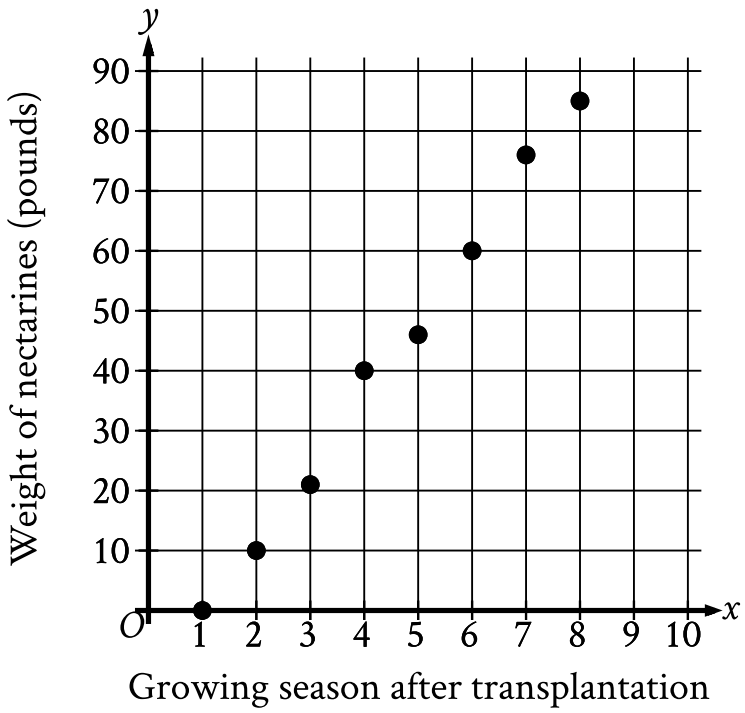
D. 2015

Question ID 9a8df0e2

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

ID: 9a8df0e2

An orchard owner recorded the weight, in pounds, of all nectarines that grew on a dwarf nectarine tree during each growing season after the tree's transplantation. The scatterplot shows this weight, in pounds, for each growing season after the tree's transplantation.



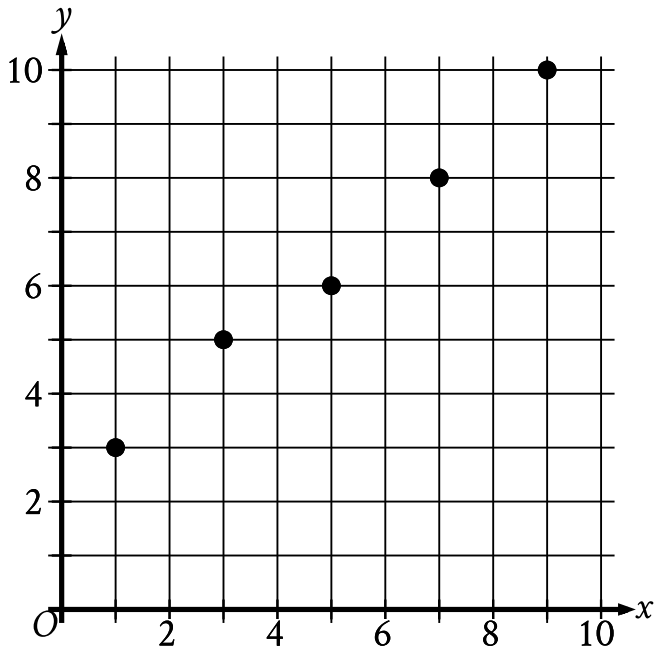
What was the weight, to the nearest pound, of all nectarines that grew on the tree during the 4th growing season after the tree's transplantation?

Question ID 57045eee

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

ID: 57045eee

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



Which equation is the most appropriate linear model for this relationship?

A. $y = -0.9x - 2.2$

B. $y = -0.9x + 2.2$

C. $y = -0.9x$

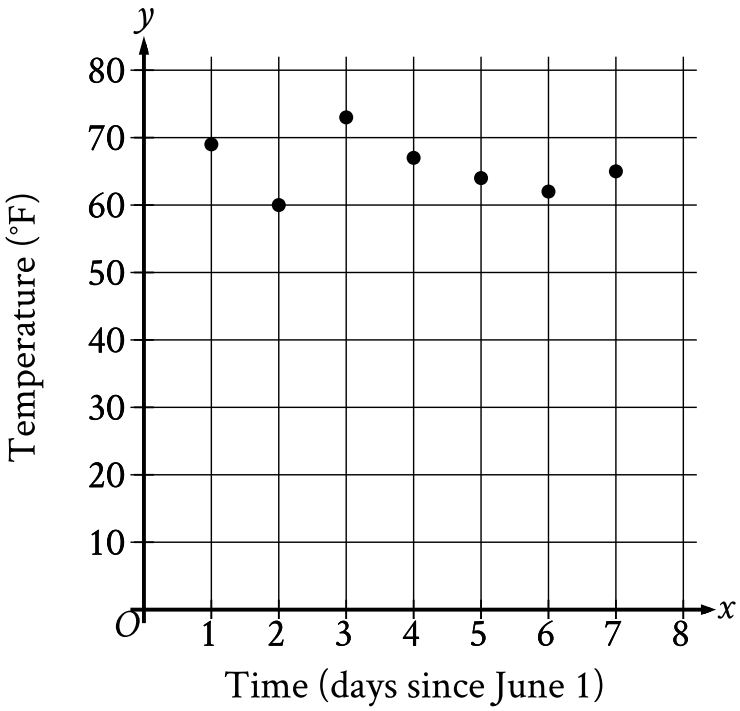
D. $y = 0.9x + 2.2$

Question ID 6a23e77a

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

ID: 6a23e77a

The scatterplot shows the temperature y, in $^\circ\mathrm{F}$, recorded by a meteorologist at various times x, in days since June 1.



During which of the following time periods did the greatest increase in recorded temperature take place?

A. From $x = 6$ to $x = 7$

B. From $x = 5$ to $x = 6$

C. From $x = 2$ to $x = 3$

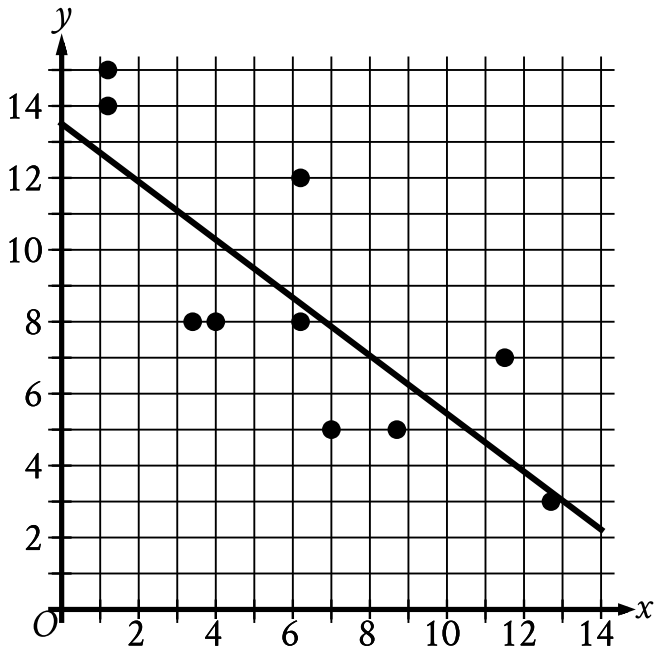
D. From $x = 1$ to $x = 2$

Question ID bce16aa4

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

ID: bce16aa4

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



Which of the following equations best represents the line of best fit shown?

A. $y = 13.5 + 0.8x$

B. $y = 13.5 - 0.8x$

C. $y = -13.5 + 0.8x$

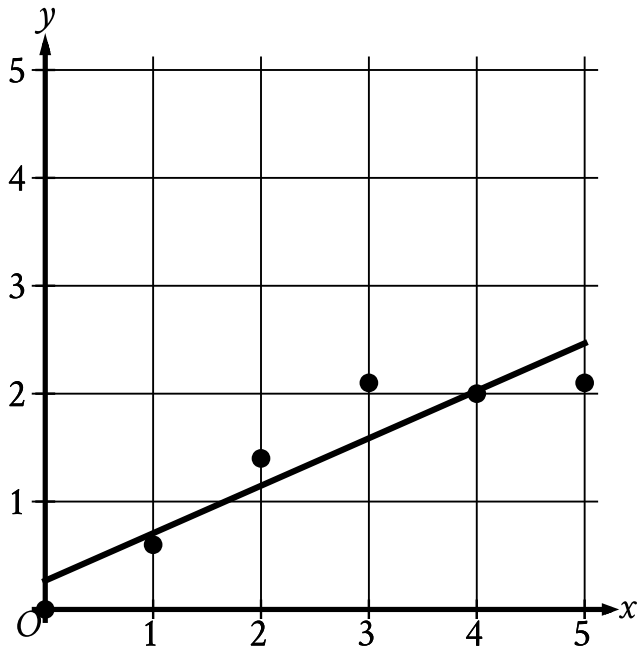
D. $y = -13.5 - 0.8x$

Question ID b018fdc5

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

ID: b018fdc5

The scatterplot shows the relationship between 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. -2.27

B. -0.44

C. 0.44

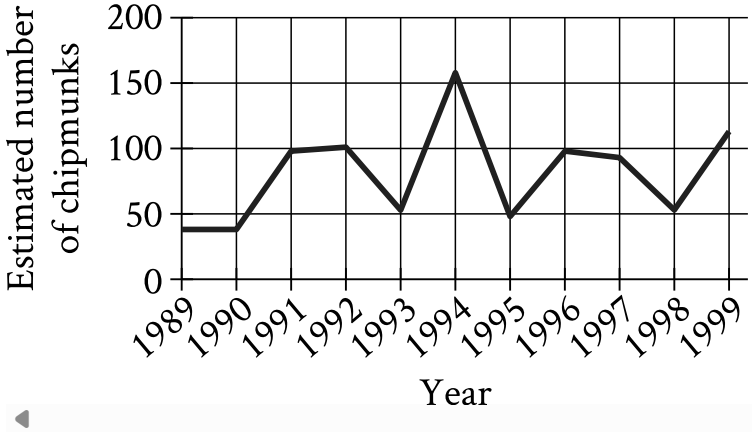
D. 2.27

Question ID 31883279

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

ID: 31883279

The line graph shows the estimated number of chipmunks in a state park on April 1 of each year from 1989 to 1999.



Based on the line graph, in which year was the estimated number of chipmunks in the state park the greatest?

A. 1989

B. 1994

C. 1995

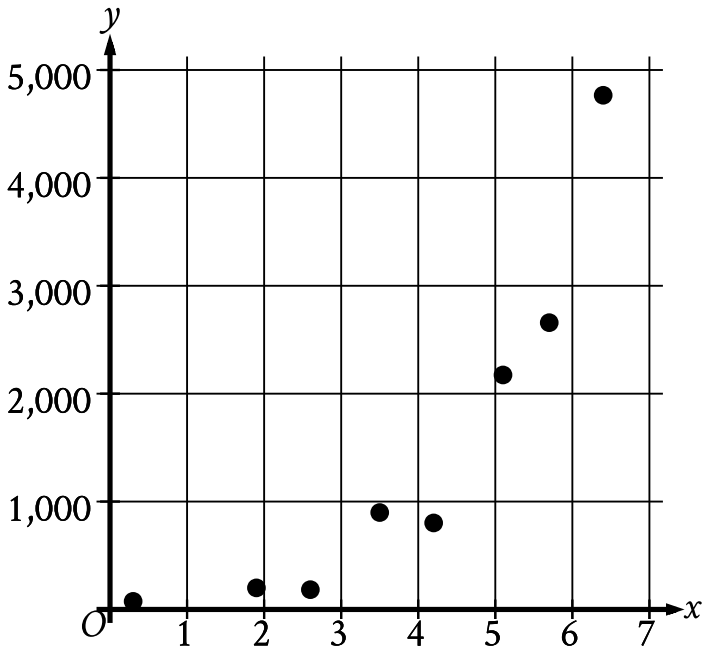
D. 1998

Question ID a7462136

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

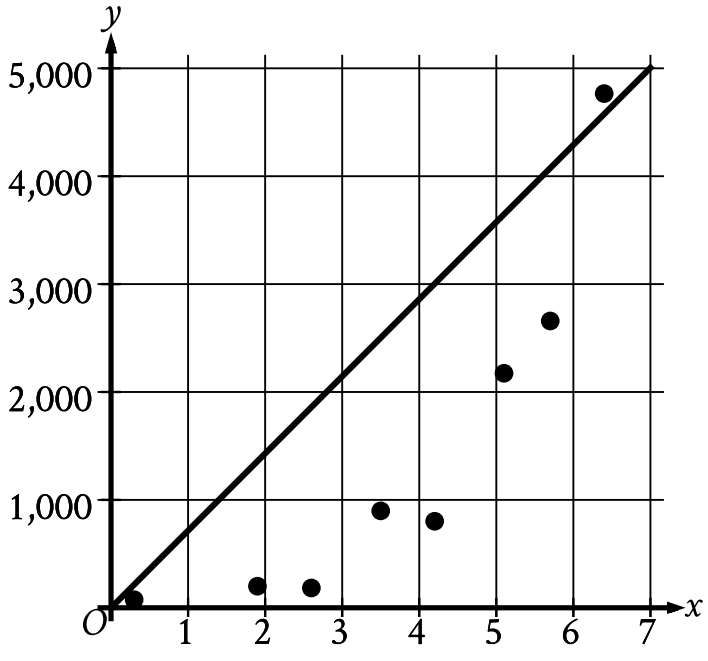
ID: a7462136

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

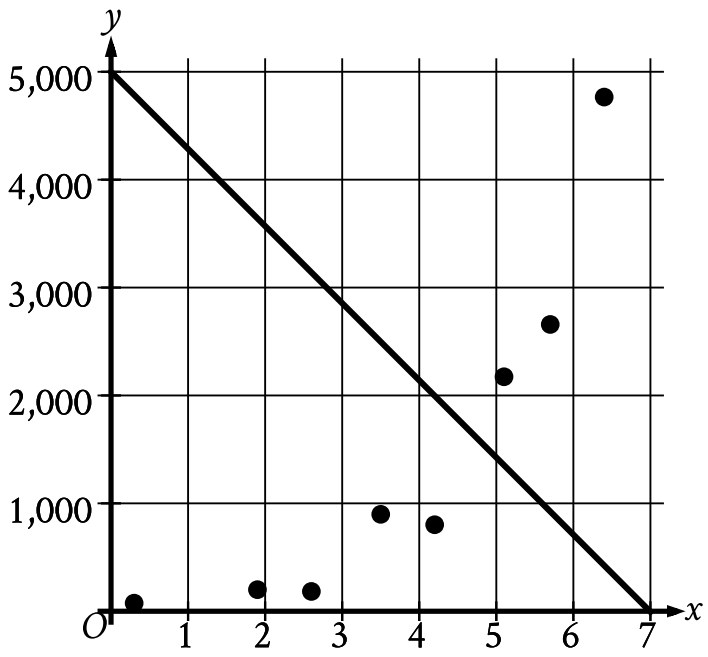


Which of the following graphs shows the most appropriate model for the data?

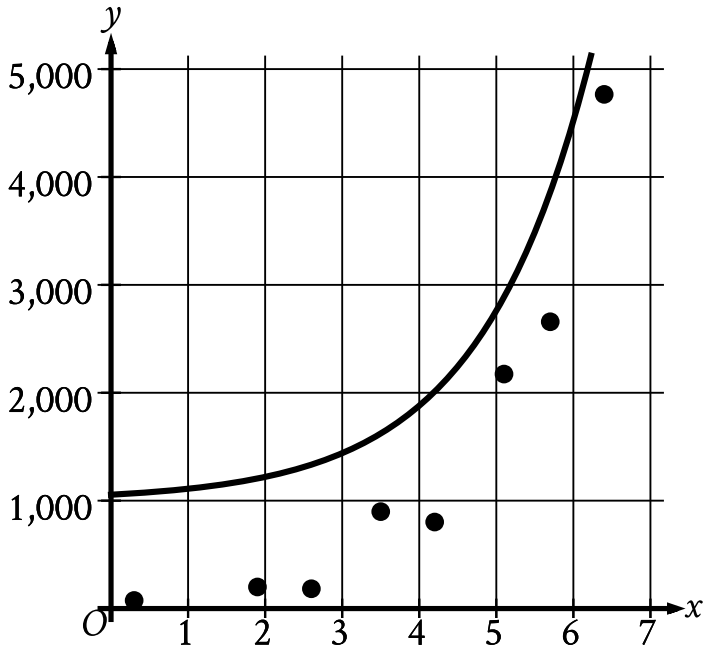
A.



B.


y
5,000
4,000
3,000
2,000
1,000
O
1
2
3
4
5
6
7
x

C.


y
5,000
4,000
3,000
2,000
1,000
O
1
2
3
4
5
6
7
x

D.