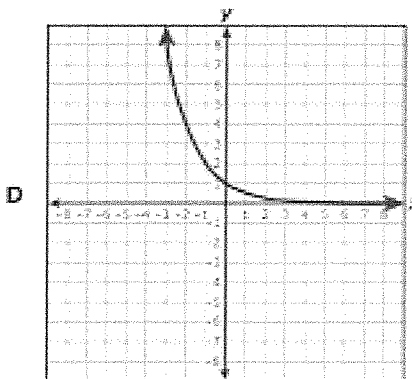
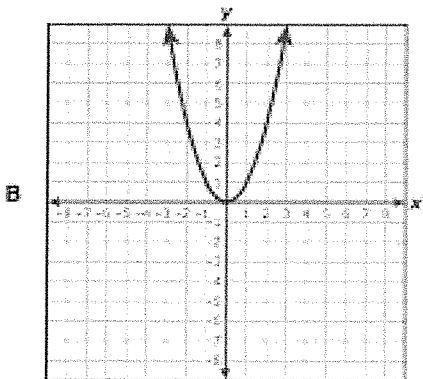
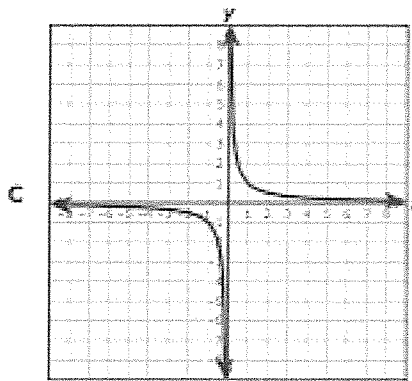
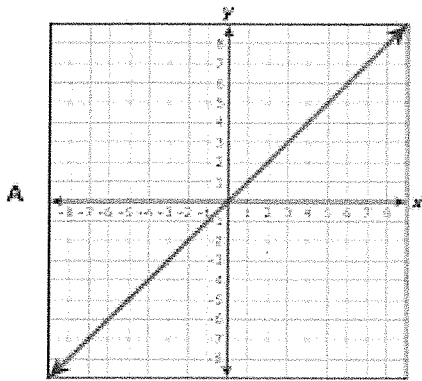


## Tables

51 Function  $k$  has a parent function. The table shows some ordered pairs that belong to  $k$ .

$x$	$k(x)$
-4	20
-3	13
-1	5
1	5
2	8

Which graph shows the parent function of  $k$ ?



## Tables

- 11 Customers at a bank are charged a fee when they exchange U.S. dollars for foreign currency. The function  $f(x) = 78.5x - 392.5$  can be used to determine the number of Japanese yen a customer receives in exchange for  $x$  dollars, where  $x > 5$ . Which table shows this relationship?

A

U.S. Dollars Exchanged	Japanese Yen Received
50	4,317.5
75	6,280
120	9,812.5
185	14,915

C

U.S. Dollars Exchanged	Japanese Yen Received
50	3,532.5
85	6,280
120	9,027.5
200	15,307.5

B

U.S. Dollars Exchanged	Japanese Yen Received
65	5,102.5
80	6,280
100	7,850
125	9,812.5

D

U.S. Dollars Exchanged	Japanese Yen Received
10	3,140
25	7,850
30	9,420
45	14,130

## Tables

39 The table represents some points on the graph of linear function  $h$ .

$x$	$h(x)$
2	490
5	295
6	230
8	100

Which situation can be modeled by this function?

- A The cost in dollars of buying  $x$  items that cost \$245 each
- B The number of miles an airplane had traveled after flying 555 miles per hour for  $x$  hours
- C The remaining number of miles on a 620-mile trip after traveling 65 miles per hour for  $x$  hours
- D The amount owed on a \$555 loan after paying \$65 per month for  $x$  months

## Tables

- 36 The table represents some points on the graph of linear function  $g$ .

$x$	$g(x)$
-4	13
-2	10.5
2	5.5
8	-2

The graph of  $g$  was translated down 10 units to create the graph of function  $h$ . Which statement comparing the graphs of  $g$  and  $h$  is true?

- F The  $x$ -intercept of the graph of  $g$  is 10 units to the right of the  $x$ -intercept of the graph of  $h$ .
- G The graph of  $g$  is steeper than the graph of  $h$ .
- H The  $y$ -intercept of the graph of  $g$  is 10 units above the  $y$ -intercept of the graph of  $h$ .
- J The graph of  $g$  is less steep than the graph of  $h$ .

## Tables

- 54 The table shows the population,  $p$ , of mice in a field at the end of  $m$  months.

Mouse Population

Time, $m$ (months)	Population, $p$
0	6
1	12
2	24
3	48
4	96

Based on the data in the table, what will be the population of mice in the field at the end of 8 months?

- F 192
- G 3,072
- H 1,536
- J 256

## Tables

- 28 The number of possible pairings of 2 objects selected from a set of  $x$  objects can be modeled by  $p(x) = 0.5x(x - 1)$ . Which table shows this quadratic relationship?

Objects

**F**

Number of Objects, $x$	Possible Pairings, $p(x)$
2	1
4	6
9	28
13	78

Objects

**H**

Number of Objects, $x$	Possible Pairings, $p(x)$
2	1
3	3
7	22
13	78

Objects

**G**

Number of Objects, $x$	Possible Pairings, $p(x)$
2	1
5	10
8	28
12	66

Objects

**J**

Number of Objects, $x$	Possible Pairings, $p(x)$
2	1
4	6
10	44
12	66

## Tables

- 3 Which table shows the same rate of change of  $y$  with respect to  $x$  as  $y = 4 - \frac{5}{8}x$ ?

A

$x$	$y$
-3	-12
-1	-4
2	8
5	20

C

$x$	$y$
-4	6.5
2	2.75
4	1.5
8	-1

B

$x$	$y$
-4	10.4
2	0.8
4	-2.4
8	-8.8

D

$x$	$y$
-3	12
-1	4
2	-8
5	-20

## Tables

- 36** The table shows the functions used to determine the number of points earned every month by regular and elite members of a dining club who spend  $d$  dollars that month at participating restaurants.

Dining Club Points

Member Status	Points Earned
Regular	$r = 5d + 100$
Elite	$e = 8d + 200$

Which statement describes the difference in these situations?

- F** Regular members earn 3 more points for every dollar spent and are automatically awarded 100 more points per month than elite members.
- G** Regular members earn 3 more points for every dollar spent and are automatically awarded 200 more points per month than elite members.
- H** Elite members earn 3 more points for every dollar spent and are automatically awarded 100 more points per month than regular members.
- J** Elite members earn 3 more points for every dollar spent and are automatically awarded 200 more points per month than regular members.



## Tables

- 38** The table shows the playing time in minutes of high-definition videos and the file size of these videos in megabytes (MB).

Videos

Playing Time, $x$ (min)	File Size, $y$ (MB)
0.5	60
1.5	180
2	240
4.5	540
5	600

What does the slope of the graph of this situation represent?

- F** The increase in the file size of the video per minute of playing time
- G** The file size of each video
- H** The playing time of each video
- J** The increase in the playing time per MB of video

## Tables

8 Which table shows the same relationship as  $y = -x^2 + 3x$ ?

F

$x$	-2	-1	0	1	2
$y$	-2	-2	0	4	10

G

$x$	-2	-1	0	1	2
$y$	-2	-1	0	1	2

H

$x$	-2	-1	0	1	2
$y$	-10	-4	0	2	2

J

$x$	-2	-1	0	1	2
$y$	-10	-4	0	4	10

## Tables

- 11 A table of values for the exponential function  $f$  is shown below.

$x$	$f(x)$
1	140,000
2	143,850
3	147,806
4	151,871
5	156,047

Which situation could describe this function?

- A The value of a house increases by approximately  $2\frac{3}{4}\%$  per year.
- B The value of a house increases by \$3,850 per year.
- C The value of a house decreases by approximately  $2\frac{3}{4}\%$  per year.
- D The value of a house decreases by \$3,850 per year.

## Tables

- 42 The dishwasher at a restaurant is loaded with the same number of dishes every time it is used. The table below shows the total number of dishes washed as a function of the number of times the dishwasher is used.

Restaurant Dishwasher

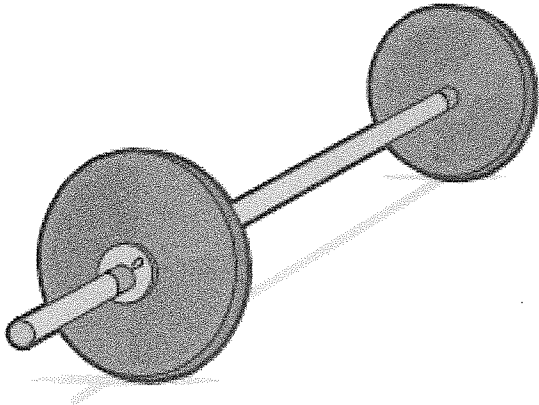
Number of Times Used	Total Number of Dishes Washed
2	52
4	104
6	156
8	208

Based on the data in the table, what is the total number of dishes that will have been washed when the dishwasher is used 9 times?

Record your answer and fill in the bubbles on your answer document.

## Tables

- 47 A weightlifter is adding plates of equal weight to a bar. The table below shows the total weight, including the bar, that he will lift depending on the total number of plates on the bar.



Number of Plates	Total Weight (lb)
2	115
4	185
6	255
8	325

Based on this information, which statement is true?

- A The bar weighs 35 lb without any plates.
- B The bar weighs 70 lb without any plates.
- C The bar weighs 45 lb without any plates.
- D The bar weighs 25 lb without any plates.