

Name _____

Date _____ Block _____

A.5

1.

Which of the following tables does *not* represent a function?

A

x	$f(x)$
2	7
3	10
5	16
8	25

B

x	$f(x)$
1	2
7	2
-4	2
-5	2

C

x	$f(x)$
36	6
36	-6
25	5
25	-5

D

x	$f(x)$
0	36
2	38
9	45
20	56

2.

x	y
0	4
3	1
6	-2

Which equation *most* likely describes the relation indicated by the table?

F $y = x + 4$

G $y = x - 2$

H $y = -x + 4$

J $y = -x - 8$

3.

Which of the following sets of ordered pairs is a function?

A $\{(2, 1), (2, 2), (3, 4), (5, 6)\}$

B $\{(-2, -1), (1, 2), (3, 4), (1, 5)\}$

C $\{(1, 2), (2, 2), (3, 3), (2, 4)\}$

D $\{(1, 1), (2, 1), (3, 2), (4, 4)\}$

4.

The table shows the relationship between the cost, c , in dollars of a taxi ride and the number, t , of minutes the ride lasts.

t	5	10	15	20
c	4.75	6.5	8.25	10

Which equation algebraically represents this data?

A $c = 3 + 0.35t$

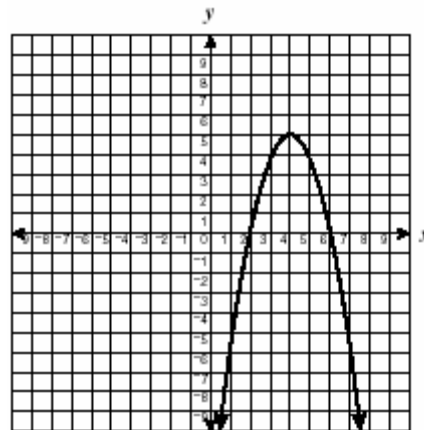
B $c = 2.75 + 0.5t$

C $c = t - 0.25$

D $c = 4 + 0.15t$

5.

The graph shows part of a function f .



What is the range of the function?

A All real numbers

B All real numbers less than or equal to five

C All real numbers greater than zero

D All real numbers between 2 and 6

6.

If $f(x) = -2x + 3$, what is $f(-4)$?

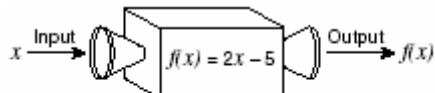
F -5

G -1

H 5.5

J 11

7.



Using the function machine from the diagram, what is $f(10)$?

- F 5
G 7.5
H 15
J 25

8.

In which table are all the points represented by the equation

$$y = \frac{-x}{4} + 2?$$

F

x	0	2	6	8
y	2	1	$\frac{1}{2}$	0

G

x	0	4	6	8
y	2	1	$\frac{1}{2}$	0

H

x	0	4	6	8
y	2	1	0	-1

J

x	0	2	4	6
y	2	1	0	$-\frac{1}{2}$

9.

The numbers in this table follow a linear pattern.

p	w
-3	14
-2	11
-1	?
0	5
1	2
2	-1

What is the missing value?

- A 7
B 8
C 9
D 10

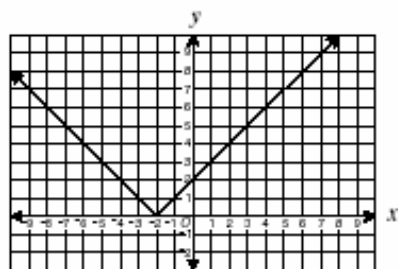
10.

x	-2	0	2	4
y	3	2	1	0

Which equation fits the data in the table?

- A $y = \frac{-x}{2} + 2$
B $y = x + 3$
C $y = 2x - 3$
D $y = \frac{x}{2} + 2$

11.



What is the domain of the function shown?

- F {All real numbers greater than zero}
G {All real numbers}
H {All real numbers less than -2}
J {All real numbers greater than -2}

12.

The ordered pairs in the table follow a quadratic pattern.

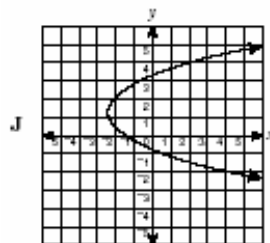
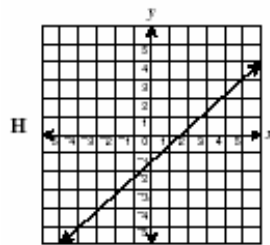
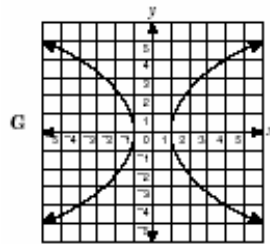
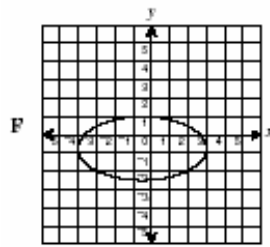
8	2	7	9	4	x
64	4	49	81	16	25

What is the value of x ?

- A 10
B 6
C 5
D 3

13.

Which of the following represents the graph of a function?



14.

x	-6	2	10
y	1	3	5

Which equation is satisfied by all the points in the table?

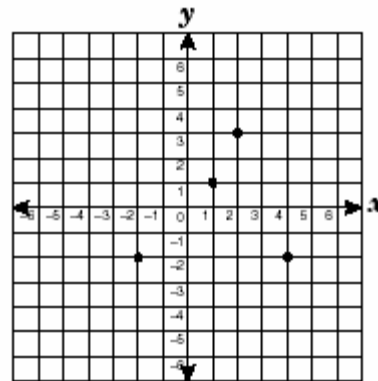
F $x - 4y = 10$

G $4y - x = 10$

H $7y - x = 20$

J $x - 7y = 20$

15.



What is the apparent range of the relation shown on the grid?

A $\{-2, 1, 3\}$

B $\{-2, 1, 2, 4\}$

C $\{1, 2, 3, 4\}$

D $\{-2, 2, 3, 4\}$

16.

Which set of ordered pairs is *not* a function?

F $\{(-2, 3), (4, 1), (2, 1), (1, 5)\}$

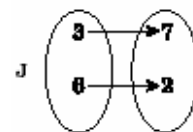
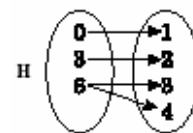
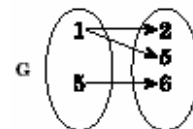
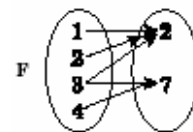
G $\{(1, 4), (2, 3), (3, 2), (4, 3)\}$

H $\{(2, 3), (3, 2), (4, 4), (5, 2)\}$

J $\{(-2, 3), (1, 4), (2, 3), (1, 5)\}$

17.

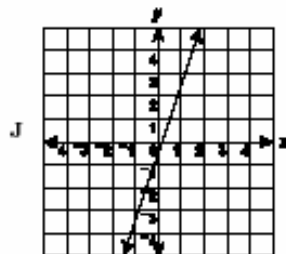
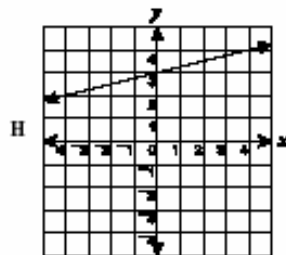
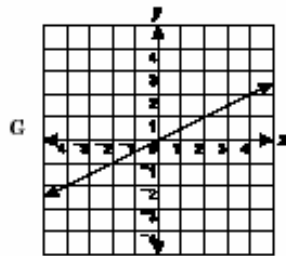
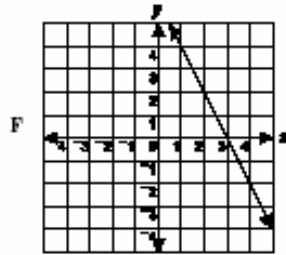
Which of these data sets represents a function?



18.

x	1	4	3
y	4	-2	0

Which graph appears to contain all the points in the table?



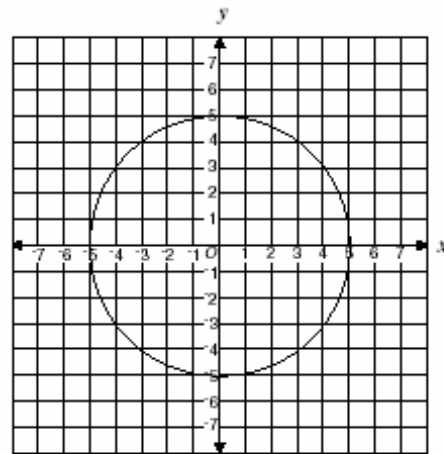
19.

If $f(x) = -2x^2 + x - 5$, what is $f(3)$?

- F -20
- G -14
- H 16
- J 34

20.

Loki said the following graph does *not* represent a function of x .



Which pair of points could Loki use to prove that her statement is correct?

- A $(-3, 4)$ and $(-3, -4)$
- B $(-4, 3)$ and $(4, 3)$
- C $(-3, 4)$ and $(4, -3)$
- D $(-5, 0)$ and $(5, 0)$

21.

x	y
-2	-11
2	1
4	7
0	-5

Which equation is true for all the values in the table?

- F $y = x - 9$
- G $y = x - 5$
- H $y = 3x - 5$
- J $y = 2x - 7$

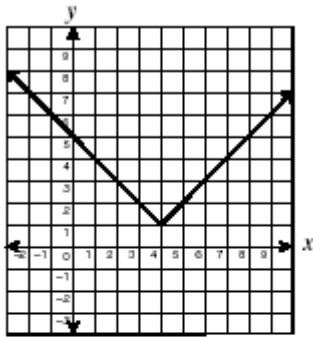
23.

x	-1	0	1	2
y	-3	-1	1	3

Which equation fits the data in the table?

- A $y = x - 2$
- B $y = 2x - 1$
- C $y = 3x - 3$
- D $y = x + 1$

24.



What is the apparent range of the function of x shown?

- F The set of all real numbers greater than or equal to 4
- G The set of all real numbers greater than or equal to 1
- H The set of all real numbers less than or equal to 1
- J The set of all real numbers

25.

The chart shows how the wholesale price of an item, p , depends on the cost of the materials needed to produce the item, m . Which equation represents this linear relationship?

m	\$0.50	\$1.00	\$1.50	\$2.00
p	\$4.00	\$5.00	\$6.00	\$7.00

- A $p = m + 3.5$
- B $p = 2m + 3$
- C $p = 3m + 2.5$
- D $p = 4m + 2$

26.

Which of the following does *not* represent a function of x ?

A

x	1	1	1	1
y	1	2	3	4

B

x	1	2	3	4
y	1	1	1	1

C

x	1	2	3	4
y	2	2	4	5

D

x	0	2	5	3
y	7	3	0	2

27.

The ordered pairs shown form a quadratic pattern.

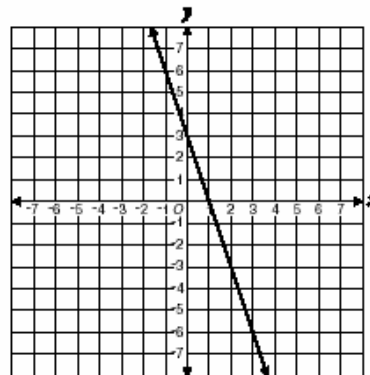
x	y
0	1
1	2
2	5
3	10
4	17
5	?

What is the missing value of y ?

- A 10
- B 22
- C 24
- D 26

28.

The graph of the function $f(x) = -3x + 3$ is shown.

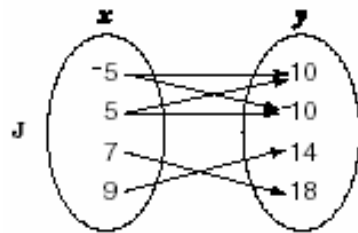
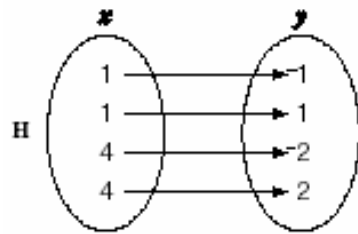
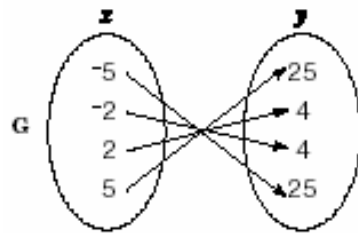
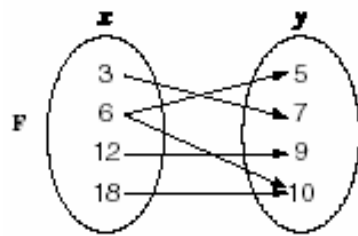


What is the value of $f(3)$?

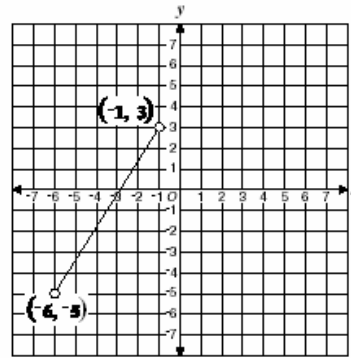
- F 3
- G 0
- H -2
- J -6

29.

Which of these data sets represents a function?



30.



What is the range of the function of x graphed above?

- F {all real numbers < 3 }
- G {all real numbers < -1 }
- H {all real numbers between -6 and -1 }
- J {all real numbers between -5 and 3 }