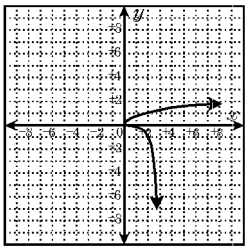
Dec. 9 - Dec. 13 HW Functions Monday: Sumdog
Tuesday 1-12 Wednesday 13-29 Thursday 29-33

Mon. 30 min sumdog _____ **Name:** _____

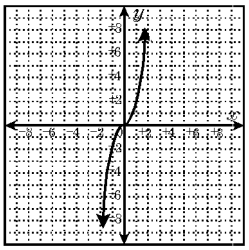
TEST on Thursday!

1. Which of the following is a function?

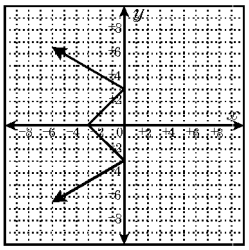
A.



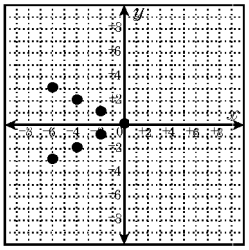
B.



C.

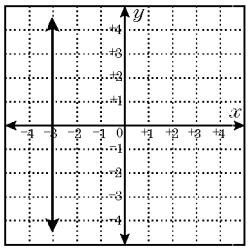


D.

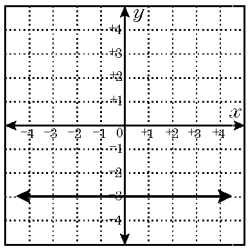


2. Which of the following graphs is *not* a function?

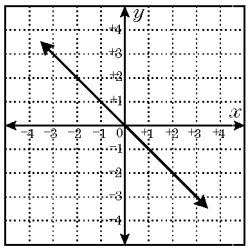
A.



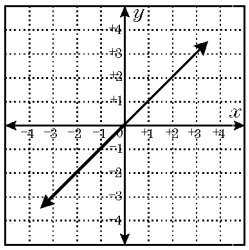
B.



C.



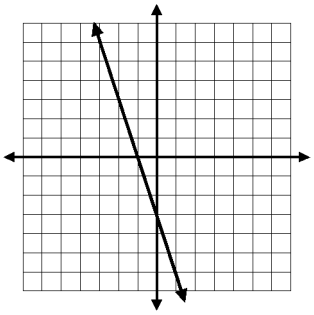
D.



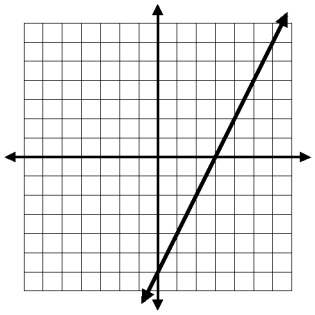
3. Which graph corresponds to the table of values?

x	2	4	5
y	-2	2	4

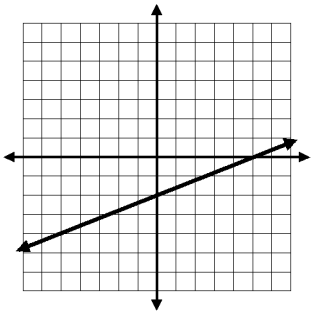
A.



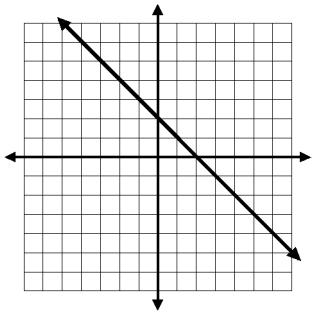
B.



C.



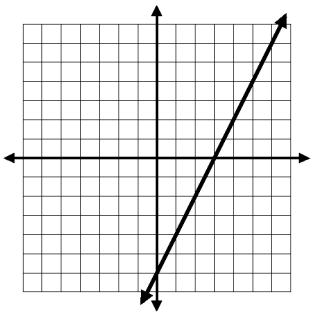
D.



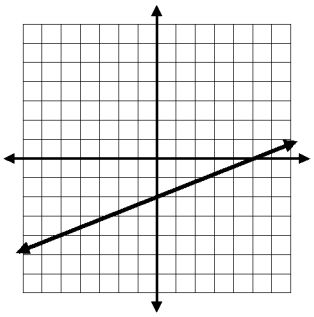
4. Which graph corresponds to the table of values?

x	-2	-1	0
y	3	0	-3

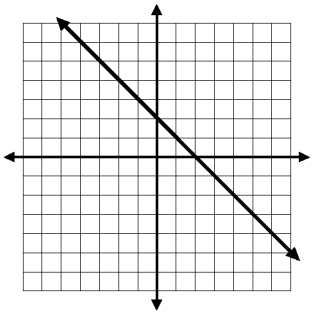
A.



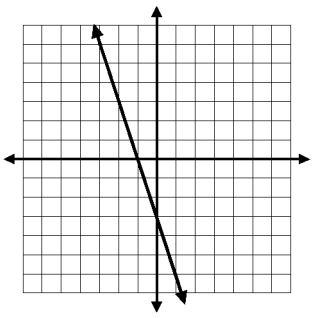
B.



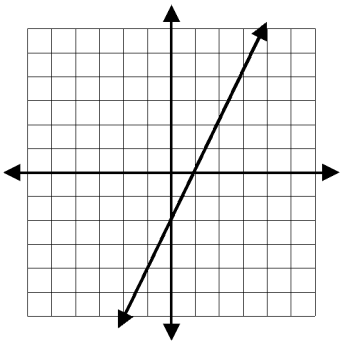
C.



D.



5. Which table accurately represents points from the depicted line?



A.

x	y
0	-2
2	2
4	6

B.

x	y
0	1
-2	0
-4	-2

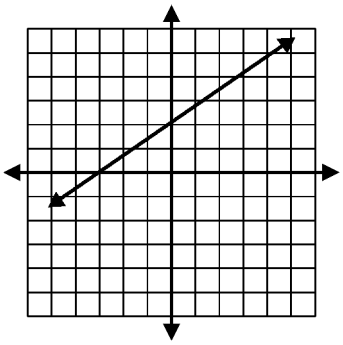
C.

x	y
-4	-2
-3	-4
-2	-6

D.

x	y
0	1
2	4
4	7

6. Which table accurately represents points from the depicted line?



A.

x	y
−6	−2
−1	0
3	2

B.

x	y
−6	3
−1	−5
3	−12

C.

x	y
−6	−12
−1	−5
3	3

D.

x	y
−6	−2
−3	0
3	4

7. If the output is 21, what is the input?

A. 10 B. 7

C. 6 D. 5

Input	Output
1	3
2	5
3	7
4	9

8. Which table represents a linear function?

A.

x	y
3	8
−2	3
4	−1

B.

x	y
5	−2
−1	2
0	0

C.

x	y
8	1
4	−1
−6	−6

D.

x	y
1	1
2	2
3	−3

9. Choose the correct table of values for the function $y = 4x - 1$.

A.

x	y
1	3
4	7
5	11

B.

x	y
2	7
3	10
6	20

C.

x	y
4	15
6	23
8	31

D.

x	y
3	1
15	4
23	6

10. Which of the following relations is *not* a function?

A.

x	y
1	2
2	3
3	4
4	5

B.

x	y
2	3
4	5
6	7
8	9

C.

x	y
-2	2
-1	3
0	4
1	5

D.

x	y
1	4
2	6
1	5
2	6

11. Which of the following sets is a function?

A. $\{(7, 3),\ (8, 1),\ (7, 6)\}$

B. $\{(1, 3),\ (4, 5),\ (4, 8)\}$

C. $\{(2, 2),\ (-3, -3),\ (0, 0)\}$

D. $\{(-5, 1),\ (-3, 2),\ (-5, 7)\}$

12. Which of the following is a function?

A. $\{(0, 0), (0, 1), (1, 2), (2, 0)\}$

B. $\{(1, 0), (1, 2), (1, 3), (1, 4)\}$

C. $\{(0, 1), (1, 2), (0, 3), (3, 4)\}$

D. $\{(0, 1), (1, 2), (2, 3), (3, 4)\}$

13. Which of the following relations does *not* represent a function?

A. $\{(1, 2),\ (2, 2),\ (3, 2)\}$

B. $\{(1, 1),\ (2, 2),\ (3, 3)\}$

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

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

14. Which of the following is always true for all functions?

I. For every x there is only one y

II. For every y there is only one x

III. The domain is the set of real numbers

A. I only B. II only

C. I and III only D. II and III only

15. Which equation could have been used to create this function table?

x	y
-6	-3
-1	2
4	7
9	12

A. $y = 3x$ B. $y = x \div 3$

C. $y = x + 3$ D. $y = x - 3$

16. Which equation gives the relationship between x and y in the table below?

x	y
-2	-8
-1	-4
0	0
1	4
2	8

A. $y = x + 4$ B. $x = y + 4$

C. $y = 4x$ D. $x = 4y$

17. Consider the table of values shown. The relationship of x to y is represented by which equation?

x	2	3	4	5	6
y	11	12	13	14	15

A. $y = 4x$ B. $y = x + 9$

C. $y = 3x + 1$ D. $y = 6x - 1$

18. Juwan kept track of the number of offers he received for credit cards each week, as shown in the table below.

x weeks	2	4	5	7
y total offers	6	10	12	16

Which of the following is the best equation to describe the relationship between the number of weeks and the number of credit card offers Juwan received?

A. $y = 2x$ B. $y = 2x + 2$

C. $y = 3x - 2$ D. $y = 4x - 6$

19. Which equation corresponds to the table of values below?

x	y
-3	-3
-1	1
2	7
3	9

A. $y = x$ B. $y = x + 2$

C. $y = 2x + 3$ D. $y = 3x + 2$

20. Which function corresponds to all of the values in the table?

x	2	1	-1	-4	-6
y	-4	-6	-10	-16	-20

A. $y = x + 8$ B. $y = -2x + 8$

C. $y = 2x - 8$ D. $y = -2x - 8$

21. Consider the table of values shown. The relationship of x to y is represented by which equation?

x	0	1	2	3	4
y	2	5	8	11	14

A. $y = 4x$ B. $y = x + 2$

C. $y = 3x + 2$ D. $y = 4x - 1$

22. Which equation can be used to create the table of values?

x	$f(x)$
-2	-7
-1	-4
0	-1
1	2

A. $y = x - 5$

B. $y = 2x - 3$

C. $y = 3x - 1$

D. $y = 2x + 3$

23. This table represents a function:

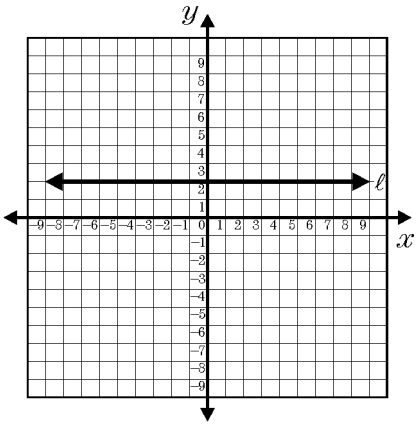
x	y
-3	-3
-1	1
2	7
3	9

Which of these equations respresents the same function?

A. $y = x$ B. $y = x + 2$

C. $y = 2x + 3$ D. $y = 3x + 2$

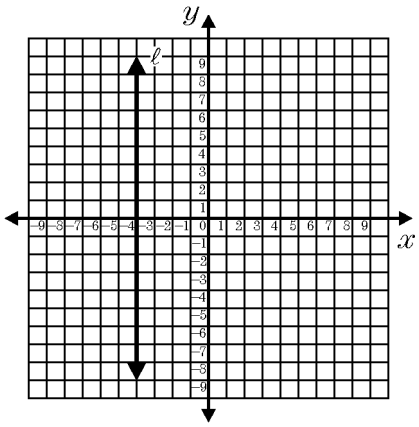
24. Which is an equation of line ℓ?



A. $x = 2$ B. $y = 2$

C. $x = -2$ D. $x = 8$

25. Which is an equation of line ℓ?



A. $y = -4$ B. $y = 4$

C. $x = -4$ D. $x = 8$

26. What equation describes this set of ordered pairs?

$\{(-1, -7),\ (0, -4),\ (1, -1),\ (2, 2)\}$

A. $4x - y = 4$ B. $3x + y = 2$

C. $x + y = 4$ D. $3x - y = 4$

27. What linear equation describes the following set of points?

$\{(-9, -1),\ (3, 7),\ (12, 13)\}$

A. $2x + 3y = 15$ B. $y = \frac{3}{2}x + 5$

C. $-2x + 3y = 15$ D. $y = \frac{2}{3}x + 15$

28. Which equation describes the line containing the points $(3, 7)$ and $(3, 2)$?

A. $x = 0$ B. $x = 3$

C. $y = 7x + 2$ D. $y = 5$

29. The graph of which of the following would show a linear relationship?

A. The number of prom dresses bought throughout the year recorded monthly.

B. The number of fireworks bought throughout the year recorded monthly.

C. The pulse of a cat cornered by a dog from 30 minutes before to 30 minutes after the incident.

D. The amount of mail going through the post office from December 1st to December 25th.

30. Which table represents a linear function?

A.

x	y
-1	1
0	0
2	4

B.

x	y
-3	-4
-1	-1
7	11

C.

x	y
2	11
-1	-5
-3	21

D.

x	y
-8	-31
-4	-11
0	1

31. A number of 3-ounce marbles are in a box. When the box has 4 marbles, it weighs 21 ounces. What is the formula for the weight of the box, w, in terms of the number of marbles, m, in the box?

A. $w = 3m + 9$ B. $w = 4m + 5$

C. $w = 4m + 9$ D. $w = 7m + 0$

32. Propane tanks can be filled at the Sunshine Gas Company for \$7.50 if customers pay a one time membership fee of \$10. Which formula best describes the total cost C in dollars of filling T propane tanks at the member price (including the membership fee)?

A. $C = 17.50T$

B. $C = 7.50T + 10$

C. $C = 7.50(T + 10)$

D. $C = 10(7.50 + T)$

33. The cost of renting a boat is \$25 and the cost of fuel and operating the boat is \$1.30 per day. Write an equation that will give the total cost (C dollars) of renting and operating a boat for d days.

A. $C = 26.50d$

B. $C = 25 + 1.30d$

C. $C = 1.30 + 25d$

D. $C = 25 + 130d$

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- Dec. 13 HW Functions Monday: Sumdog Tuesday 1-12 Wednesday 13-29 Thursday 29-33 Mon. 30 min sumdog _____ 12/(

1.
Answer: B
Objective: 8.F.01

2.
Answer: A
Objective: 8.F.01

3.
Answer: B
Objective: 8.F.01

4.
Answer: D
Objective: 8.F.01

5.
Answer: A
Objective: 8.F.01

6.
Answer: D
Objective: 8.F.01

7.
Answer: A
Objective: 8.F.01

8.
Answer: C
Objective: 8.F.01

9.
Answer: C
Objective: 8.F.01

10.
Answer: D
Objective: 8.F.01

11.
Answer: C
Objective: 8.F.01

12.
Answer: D
Objective: 8.F.01

13.
Answer: C
Objective: 8.F.01

14.
Answer: A
Objective: 8.F.01

15.
Answer: C
Objective: 8.F.04

16.
Answer: C
Objective: 8.F.04

17.
Answer: B
Objective: 8.F.04

18.
Answer: B
Objective: 8.F.04

19.
Answer: C
Objective: 8.F.04

20.
Answer: C
Objective: 8.F.04

21.
Answer: C
Objective: 8.F.04

22.
Answer: C
Objective: 8.F.04

23.
Answer: C
Objective: 8.F.04

24.
Answer: B
Objective: 8.F.04

25.
Answer: C
Objective: 8.F.04

26.
Answer: D
Objective: 8.F.04

27.
Answer: C
Objective: 8.F.04

28.
Answer: B
Objective: 8.F.04

29.
Answer: D
Objective: 8.F.01

30.
Answer: B
Objective: 8.F.01

31.
Answer: A
Objective: 8.F.04

32.
Answer: B
Objective: 8.F.04

33.
Answer: B
Objective: 8.F.04