Algebra 1 Unit Review
-Linear Equations-

Name _____ Date _____

1. Which point is on the graph $y = 2 - x$?

A (2, 4)
B (5, 3)
C (2, - 4)
D (5, -3)

2. Is the point (5, 2) a solution to $2y + x = 9$?

Circle one: YES NO

Find the *x* and *y*–intercepts of the following equations:

3. $y = 3x - 12$

4. $8x + 7 = y$

5. What is the *x*–intercept of the line defined by $-2x + 3y = 12$?

A 6
B 4
C -4
D -6

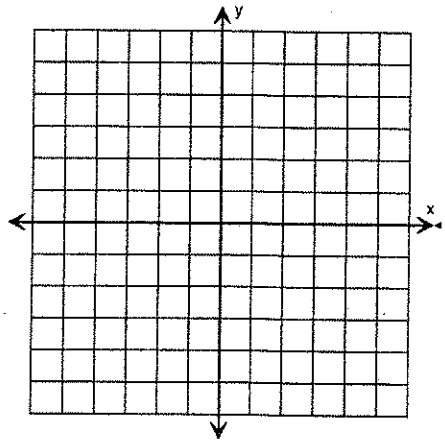
Create a table of ordered pairs for this equation:

6. $y = 5 - 2x$

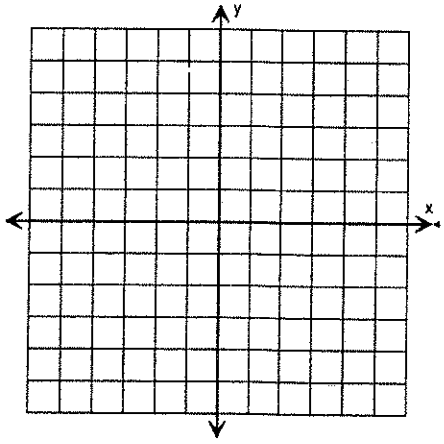
x	y

Graph the following equations by using ANY method

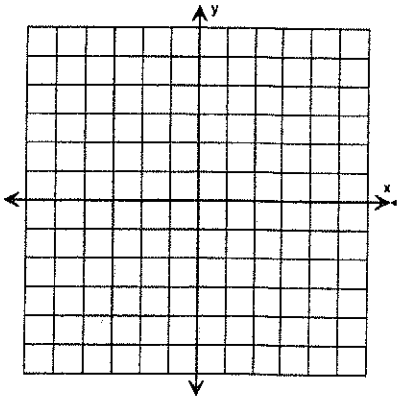
7. $y = 3x - 1$



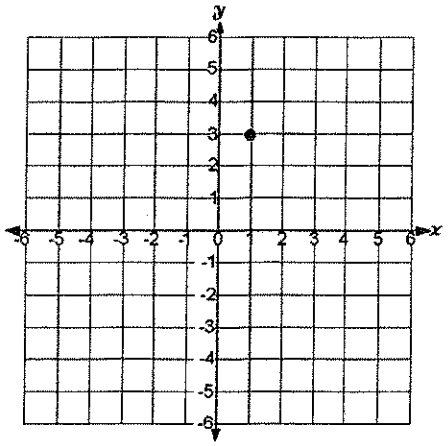
8. $y = 5 - x$



9. Graph $4x + 2y = 10$

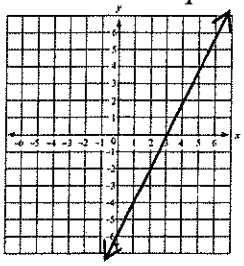


10. What is the ordered pair for the point graphed below?



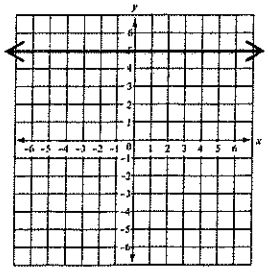
A (–1, – 3)
B (–1, 3)
C (1, 3)
D (3, 1)

11. What is the *x*-intercept of the graph?

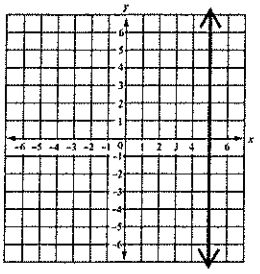


A (–12, 0)
B (–6, 0)
C (3, 0)
D (6, 0)

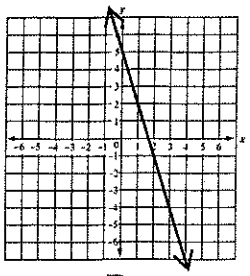
12. Which of the following is the graph of $y = 3x + 5$?



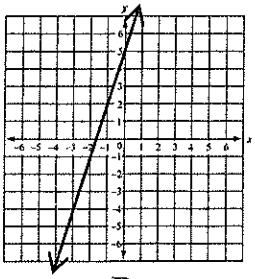
A



C



B



D

13. Write the equation of the line that passes through the point (1, 2) and has a slope of 3.

14. Write the equation of the line that passes through (0, 8) and has a slope of -1.

15.

x	y
-2	7
0	9
2	11

Which of the following equations was used to generate the table above?

A $y = -x + 9$
B $y = x + 7$
C $y = -x - 2$
D $y = x + 9$

16. Write an equation of the line that created this table of ordered pairs:

x	y
1	4
3	10
5	16

17. What is the equation of the line that created this table:

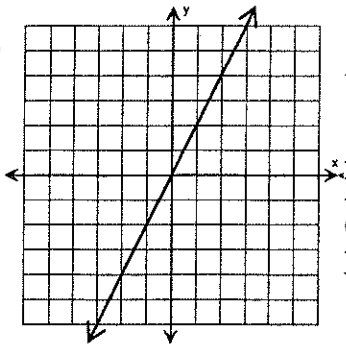
x	y
1	9
4	3
7	-3

A $y = -2x + 11$
B $y = 2x - 5$
C $y = 2x + 1$
D $y = -2x + 5$

18. Which of the following equations below represents the line that passes through (1, 10) and (0, 7)?

A $y = x + 9$
B $y = 3x + 2$
C $y = 3x + 7$
D $y = -3x + 13$

19.



Which equation *best* represents the graph to the left?

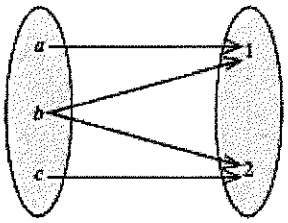
A $y = x$
B $y = 2x$
C $y = x + 2$
D $y = 2x + 2$

For questions 20 & 21, write the relation as a set of ordered pairs, b. identify the domain, and c. identify the range.

20.

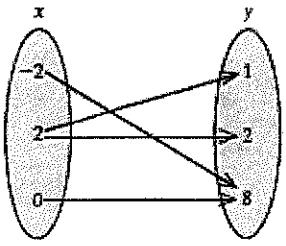
Parent, *x*	Child, *y*
Kevin	Katie
Kevin	Kira
Kathleen	Katie
Kathleen	Kira

21.



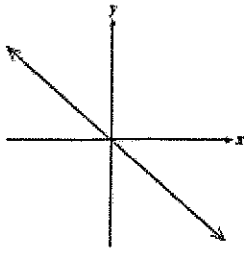
In questions 22-25, determine if the relation defines *y* as a function of *x*.

22.

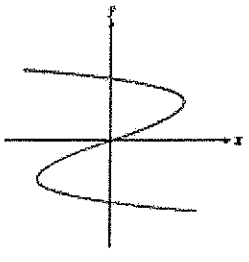


23. {(1, 2), (3, 4), (5, 4), (−9, 3)}

24.



25.



Evaluate the following functions.

26. $g(x) = 3x - 3$; Find $g(-6)$

27. $f(x) = 4x - 5$; Find $f(x - 2)$

28. $h(n) = -2n^2 + 4$; Find $h(4)$

29. $f(x) = x^2 - 3x$; Find $f(8)$