

6.1 Equations, Tables, & Graphs

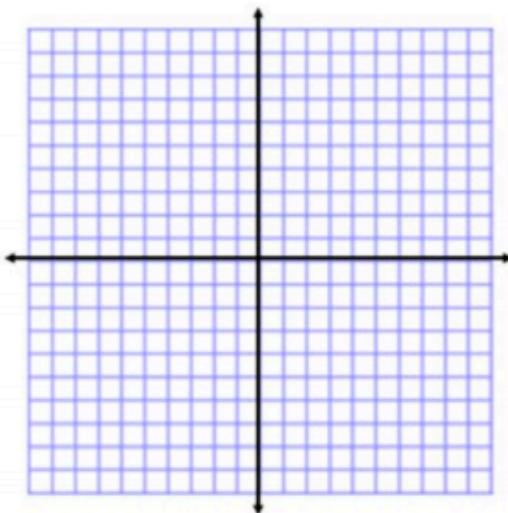
Introduction to Linear Relationships

NOTES

ALGEBRA

Write your
questions here!

Cartesian Plane

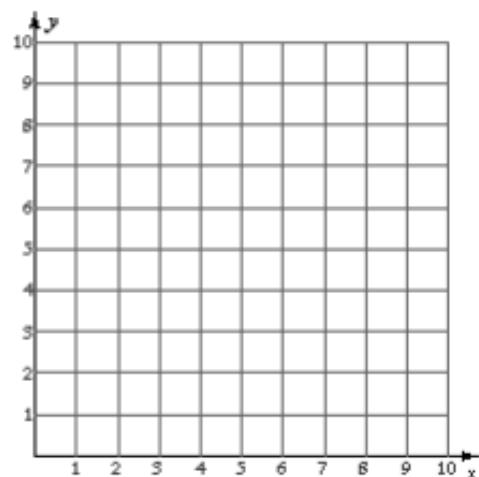


Table

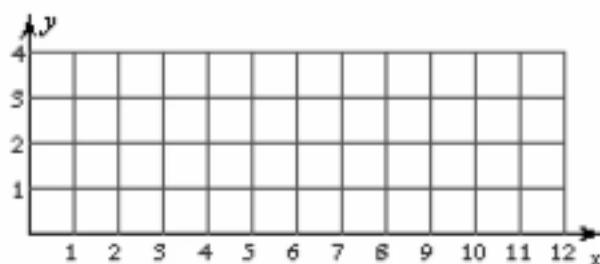
Domain	Range

Ordered Pairs

Graph



Graph the function $y = \frac{1}{4}x$
with the domain $\{0, 4, 8, 12\}$

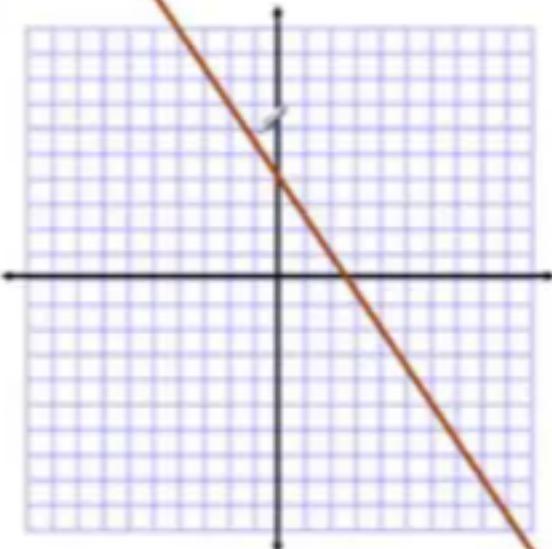


You try!

1) Graph $y = 3x - 2$ with the domain: 0, 1, 2, 3, 4.



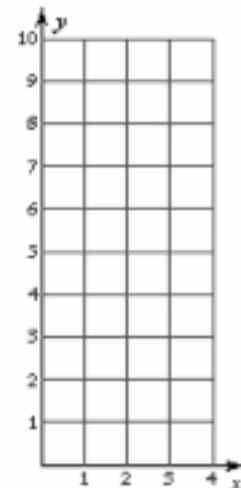
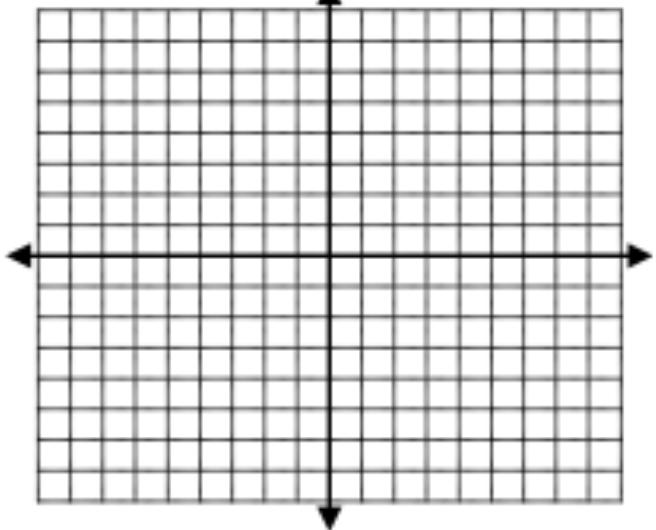
Goin' Fis'in



Graph the equation of a line:

$$y = \frac{2}{3}x + 1$$

Domain	Equation	Range
Input (x)		Output (y)



Is the point (5, 8) a solution to $y = -2x + 3$?

Input	Output
3	15
5	25
8	40
10	50

$$y =$$

Input	7	12	19	30
Output	10	15	22	33

$$y =$$

Summarize your notes:

Now,
summarize
your notes
here!

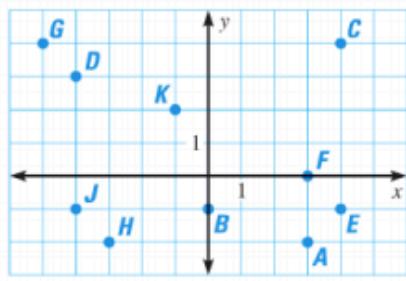
6.1 Equations, Tables, & Graphs

Introduction to Linear Relationships

PRACTICE

For 1-6, state the coordinates of the point.

1. A (,)



2. C (,)

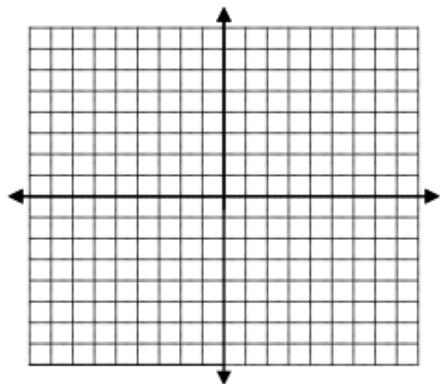
3. E (,)

4. G (,)

5. J (,)

For 6-9, plot the points in a coordinate plane.
Describe the location of the point (what quadrant?)

6. Q (-1, 5)

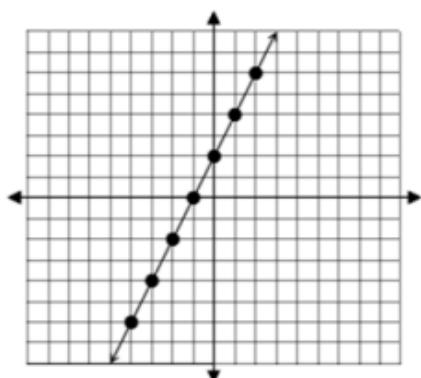


7. S (0, 0)

8. U (0, 6)

9. W (3, -2.5)

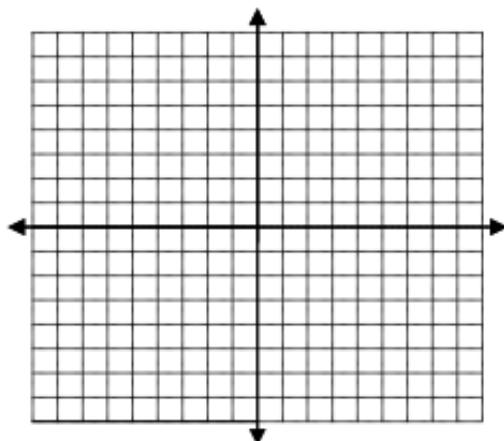
10. Fill in the table!



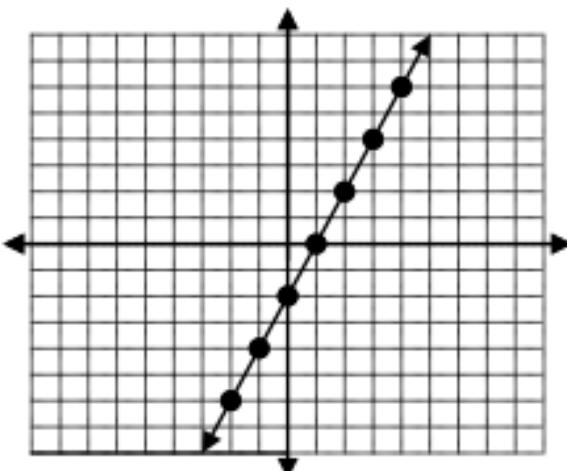
x	y
-3	
-2	
-1	
0	
1	
2	

11. Given the table. Graph the line.

x	y
-1	8
0	4
1	0
2	-4
3	-8



12. Given the graph. Fill in the table.



x	y
-2	
-1	
0	
1	
2	
3	

13. Given the equation. Fill in the table.

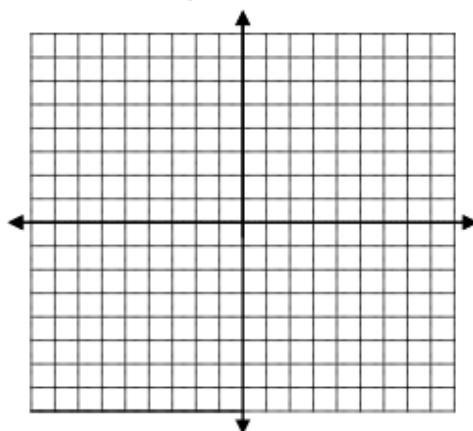
$$y = -3x + 6$$

x	y
-2	
-1	
0	
1	
2	
3	
20	

14. Given the equation. Make the graph.

(HINT: Make a table if you need it!)

$$y = x - 5$$



Make a table for the function. Identify the range of the function.

15. $y = \frac{1}{2}x + 7$
Domain: 2, 6, 10, 12

16. $y = x + 3.5$
Domain: 12, 15, 22, 30

17.. $y = \frac{1}{2}x + 3$
Domain: 4, 6, 9, 11

18. Table representing price of gas per gallon.

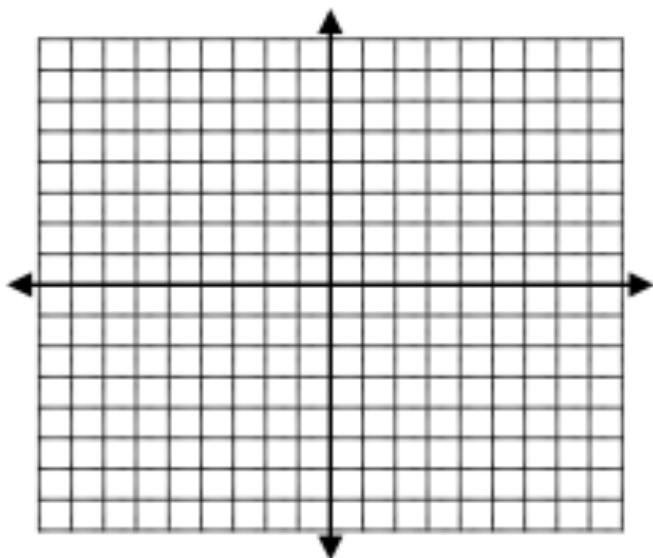
Input (gallons)	10	12	13	17
Output(dollars)	19.99	23.99	25.99	33.98

Domain:

Range:

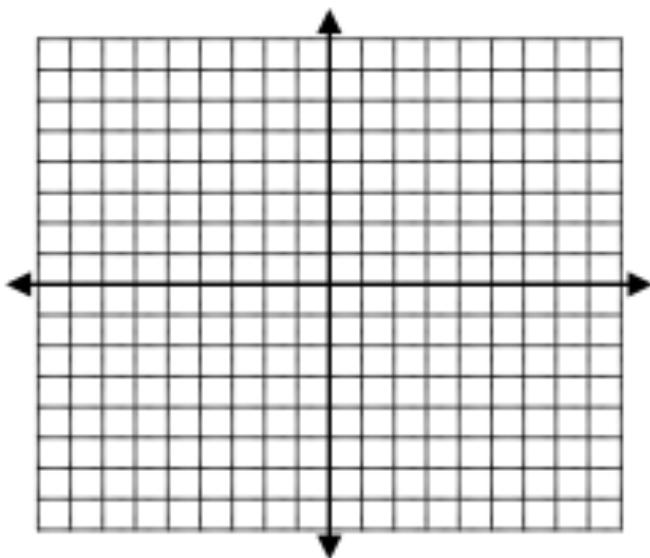
19. Graph the equation of a line: $y = \frac{3}{4}x - 4$

Domain	Equation	Range
Input (x)		Output (y)



20. Graph the equation of a line: $y = -\frac{2}{5}x + 3$

Domain	Equation	Range
Input (x)		Output (y)



Write an equation for the following table.

21.	Input, x	15	20	21	30	42
	Output, y	7	12	13	22	34

22.	Input(x)	4	7	10	13
	Output (y)	8	11	14	17

23.	Inputs, x	2	4	7	8
	Outputs, y	7	9	12	13

24.	Input (x)	-1	0	2	5
	Output (y)	-3	0	6	15

25.	Input (x)	11	15	23	34
	Output (y)	22	30	46	68

26.	Input (x)	5	8	11	18
	Output (y)	-2	1	4	11

27.	Input (x)	1	3	5	7
	Output (y)	-1	-3	-5	-7

28.	Input (x)	8	12	16	20
	Output (y)	2	3	4	5

CHECKING SOLUTIONS Tell whether the ordered pair is a solution to the equation.

29. $2y + x = 4$ (-2, 3)

30. $x = 9$ (9, 6)

31. $7x - 4y = 1$ (-3, -5)

32. **ERROR ANALYSIS** Describe and correct the error in determining whether (8, 11) is a solution of $y - x = -3$

$y - x = -3$

$8 - 11 = -3$

$-3 = -3$ (8, 11) is a solution.

33. **MULTIPLE CHOICE** Which ordered pair is a solution of $6x + 3y = 18$?

A. (-2, -10)

B. (-2, 10)

C. (2, 10)

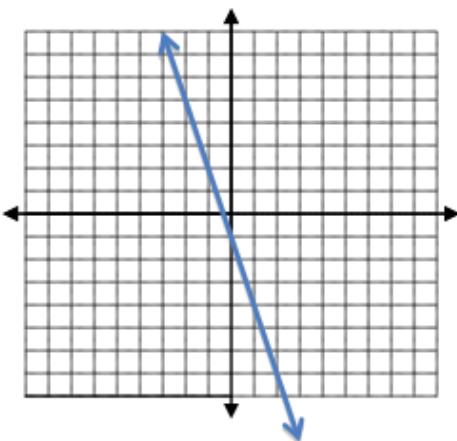
D. (10, -2)

5.6 Equations, Tables, & Graphs

Introduction to Linear Relationships

APPLICATION

1. Use the graph to fill in the table.



2. Is $\left(\frac{5}{2}, -6\right)$ a solution to $y = 4x - 4$? Show work!

x	y
-2	
-1	
0	
1	
2	

3. The journalism class makes \$25 per page of advertising in the yearbook. If the class sells p pages of advertising, how much money will the class earn?

Fill in the table and write an equation for the scenario.

# of pages (p)	0	1	2	3	4	p
Money Earned (M)						

Equation: $M =$

4. Write an equation to represent the linear relationship between Keith and Chuck's prospective ages?

Keith and Chuck were born on the exact day, but not in the same year.
Their ages are shown in the table below.

Keith's Age (K)	12	15	19	27	32	33	K
Chuck's Age (C)	9	12	16	24	29	30	

Equation: $C =$