Given y = -4x + 10 find the missing value of the coordinate.

x y
a) (-5, ___)

x y
b) (___, -34)

a) Given
x = -5
y = ?

$y = -4x + 10$

$y = -4(-5) + 10$

$y = 20 + 10$

$y = 30$

(-5, 30)

b) Given y = -34
x = ?

$y = -4x + 10$

$-34 = -4x + 10$

$-34 \underbrace{-10} = -4x + 10 - 10$

$-44 = -4x$

$\div(-4) \quad \div(-4)$

$11 = x$

(11, -34)

Math 8 Hol: Graphing Linear Equations PRE QUIZ Assignment

Name:

1. Complete the table of values for the linear relation y= -5x +4 (Show work for the first 3 entries)

x	0	1	2	3	4
y	4	-1	-6	-11	-16

$x = 0$

$y = -5x + 4$

$-5(0) + 4$

$0 + 4$

4

$x = 1$

$y = -5x + 4$

$-5(1) + 4$

$-5 + 4$

-1

$x = 2$

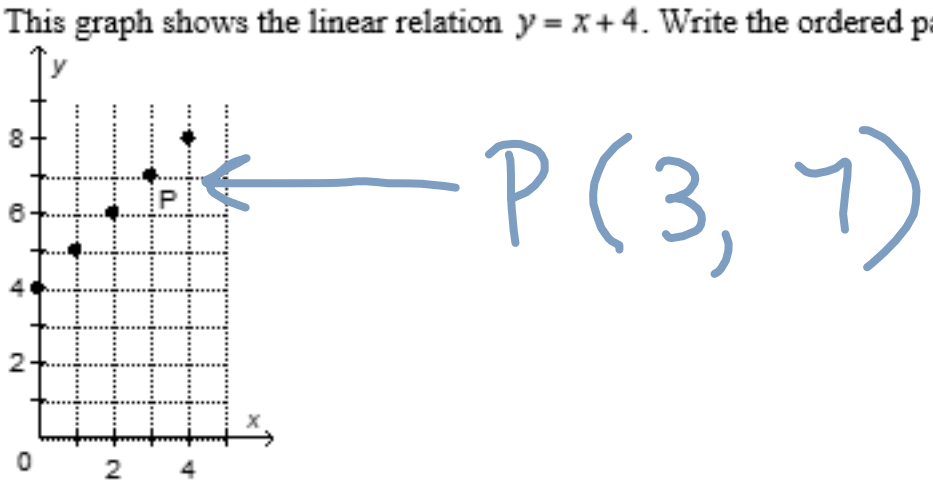
$y = -5x + 4$

$-5(2) + 4$

$-10 + 4$

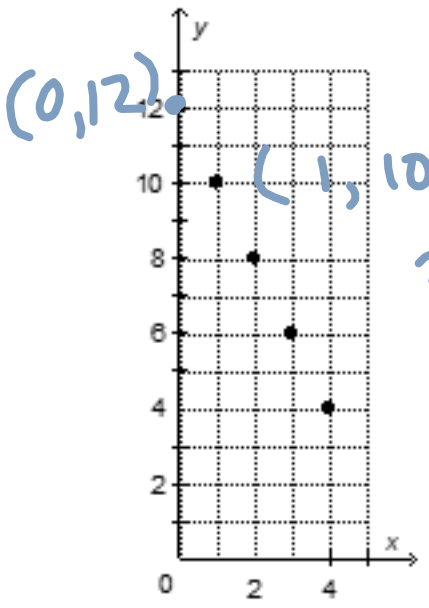
-6

2. This graph shows the linear relation $y = x + 4$. Write the ordered pair for point P.



P(3, 7)

3. Describe the relationship between the variables x and y in this graph. Graph of $y = -2x + 12$
Hint: Write out the table of values then describe "As x _____, then y_____"

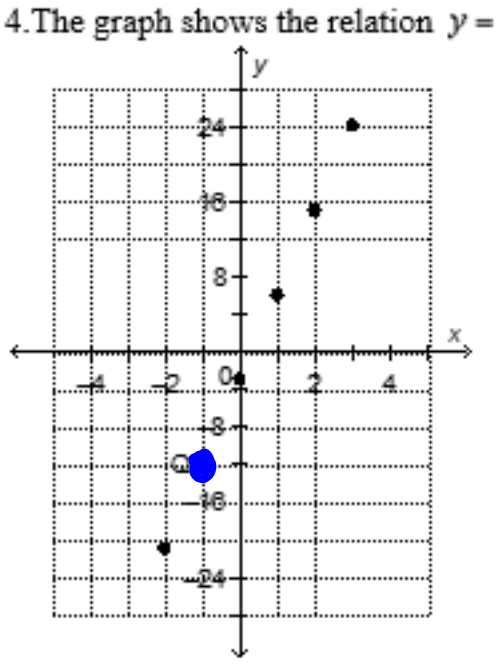


(0,12)
(1, 10
2, 8

x	y
0	12
1	10
2	8
3	6
4	4

As x increases by 1, y decreases by 2.

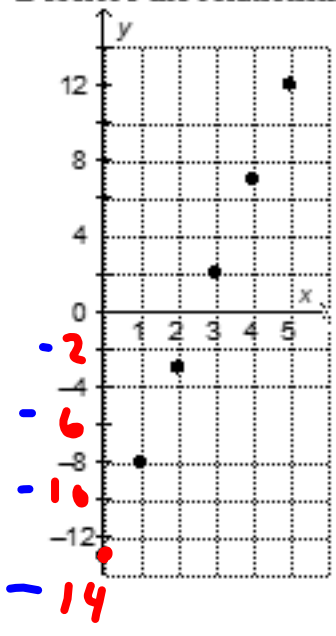
4. The graph shows the relation $y = 9x - 3$. Write the ordered pair for point Q.



9(-1) - 3
-9 - 3
-12

Q (-1, -12)

5. The graph shows the linear relation $y = 5x - 13$.
Describe the relationship between the variables x and y.



x	y
0	-13
1	-8
2	-3
3	2
4	7
5	12

up 1 (x) up 5 (y)

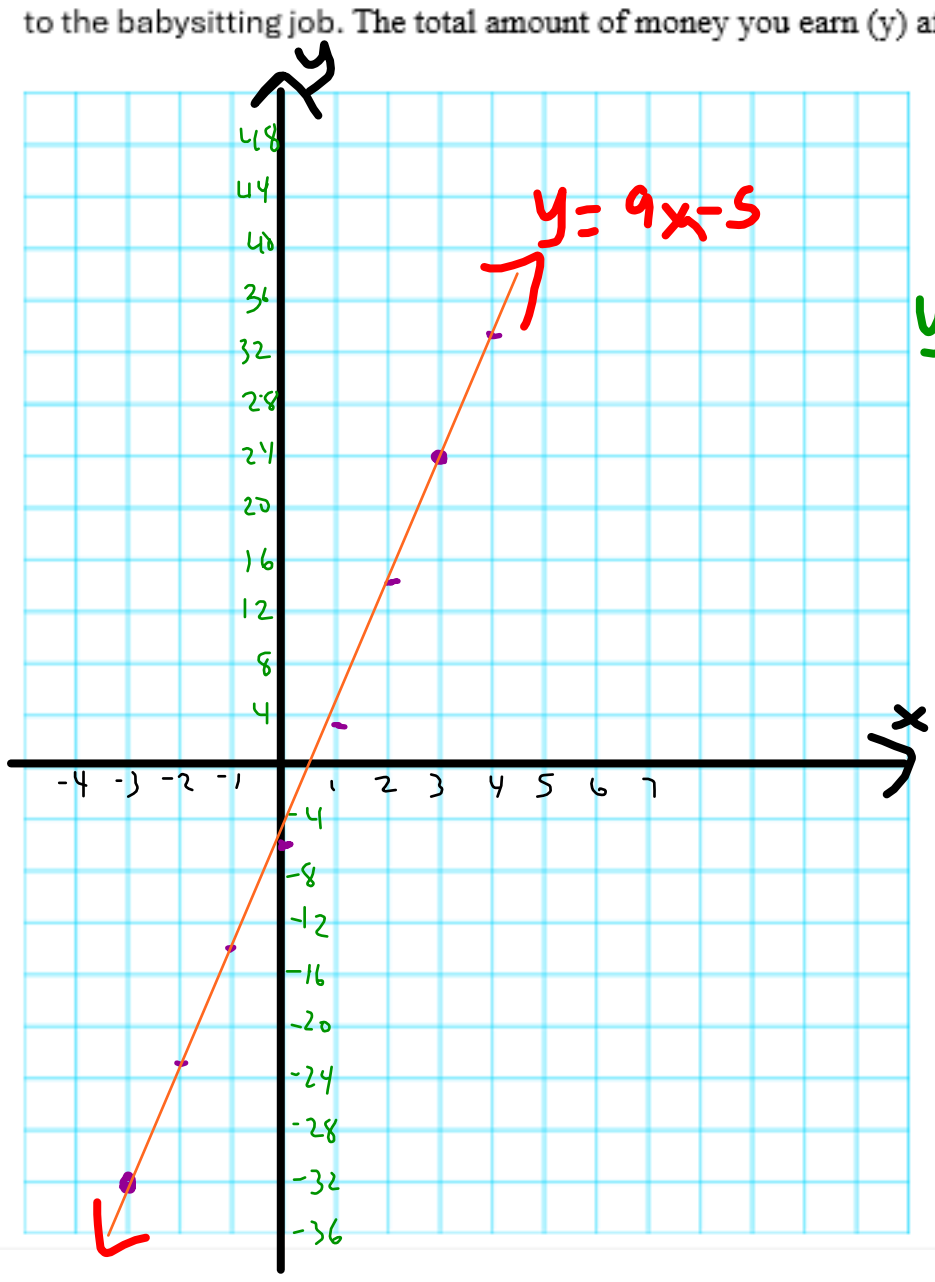
As x increases by 1, y increases by 5

6. a) Graph the relation $y = 9x - 5$ for integer values of x from -4 to 4.

b) Describe the relationship between the variables x and y in the graph. (Hint: As x _____, y _____)

c)Can you connect the dots if the above equation represent:

'You work as a babysitter and earn $9 per hour. However, there's a $5 fee you have to pay for transportation to get to the babysitting job. The total amount of money you earn (y) after working for x hours is given by the equation." ?



Show your work here for you chart & include chart.

$x = -4$: $y = 9x - 5 = 9(-4) - 5 = -36 - 5 = -41$

$x = -3$: $y = 9x - 5 = 9(-3) - 5 = -27 - 5 = -32$

$x = -2$: $y = 9x - 5 = 9(-2) - 5 = -18 - 5 = -23$

X	Y
-4	-41
-3	-32
-2	-23
-1	-14
0	-6
1	+3
2	+15
3	+24
4	+33

up 9

b)

c) Can you connect the dots?

yes, since no scenario

7. Nancy makes and sells cookies. The cost of baking goods is $300 and each cookie sells for $2.
If c represents the number of cookies sold and p represents Nacy's profit in dollars, an equation for this relation is $P = 2c - 300$.

a) Make a table of values for $c = 0$, 50, 100, 150, 200, and 250.
b) What does a negative value of P mean?
c) What is Nancy's profit if she sells 500 cookies?

$c = 0$: $P = 2c - 300$; $2(0) - 300$; $0 - 300$; -300

$c = 50$: $P = 2c - 300$; $2(50) - 300$; $100 - 300$; -200

$c = 100$: $P = 2c - 300$; $2(100) - 300$; $200 - 300$; -100

c	P
0	-300
50	-200
100	-100
150	0
200	100
250	200

b) Negative Profit means You are in debt. (Owe money)

c) $P = 2c - 300$
$2(500) - 300$
$1000 - 300$
$700

She makes a profit of $700 when she sells 500 cookies

8. A box contains 8 candies. The candies have to be shared between Cam and Kathy.
Let c represent the number of candies Cam gets and k represent the number that Kathy gets.
An equation for this relation is $k = 8 - c$.

a) Create a table of values for the relation.
b) Graph the relation.
c) Which ordered pair suggests the

$c = 1$: $K = 8 - c$; $K = 8 - 1$; 7

$c = 2$: $K = 8 - c$; $K = 8 - 2$; 6

$c = 3$: $K = 8 - c$; $K = 8 - 3$; 5

C	K
1	7
2	6
3	5
4	4
5	3