

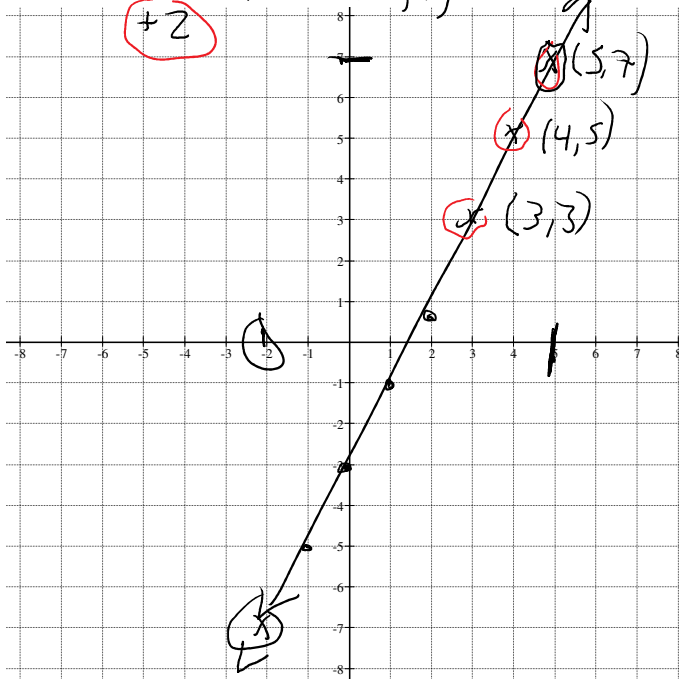
6.2 Graphing Linear Relations

Ex. Graph each linear equation:

$y = 2x - 3$

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

$2(-1) - 3 = -5$ $(-1, -5)$
 $2(0) - 3 = -3$ $(0, -3)$
 $2(1) - 3 = -1$ $(1, -1)$
 $2(2) - 3 = 1$ $(2, 1)$



Find the value of y when $x = 5$.

7 or $y = 2(5) - 3$
 $= 10 - 3$
 $= 7$

Find the value of x when $y = -7$.

-2 or $-7 = 2x - 3$
 $-4 = 2x$
 $-2 = x$

Ex. Shayla is paid \$20 per hour. The hours of work are rounded to the nearest half hour.

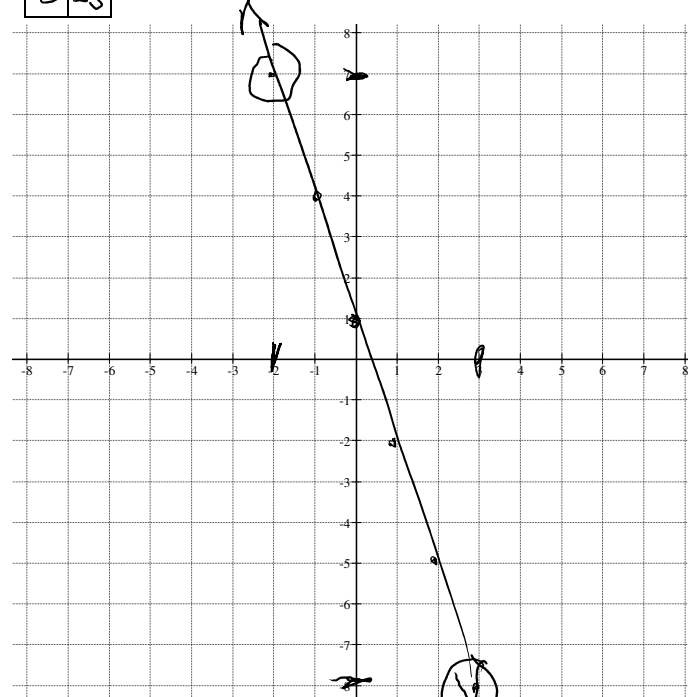
- a) Construct a table of values for the hours of work (h) and her pay (p) for up to 4 hours.

h	p
0	0
1	20
2	40
3	60
4	80

$y = -3x + 1$

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

$\frac{-3}{+1} = -3$
 $+1$
 -3



Find the value of y when $x = -2$.

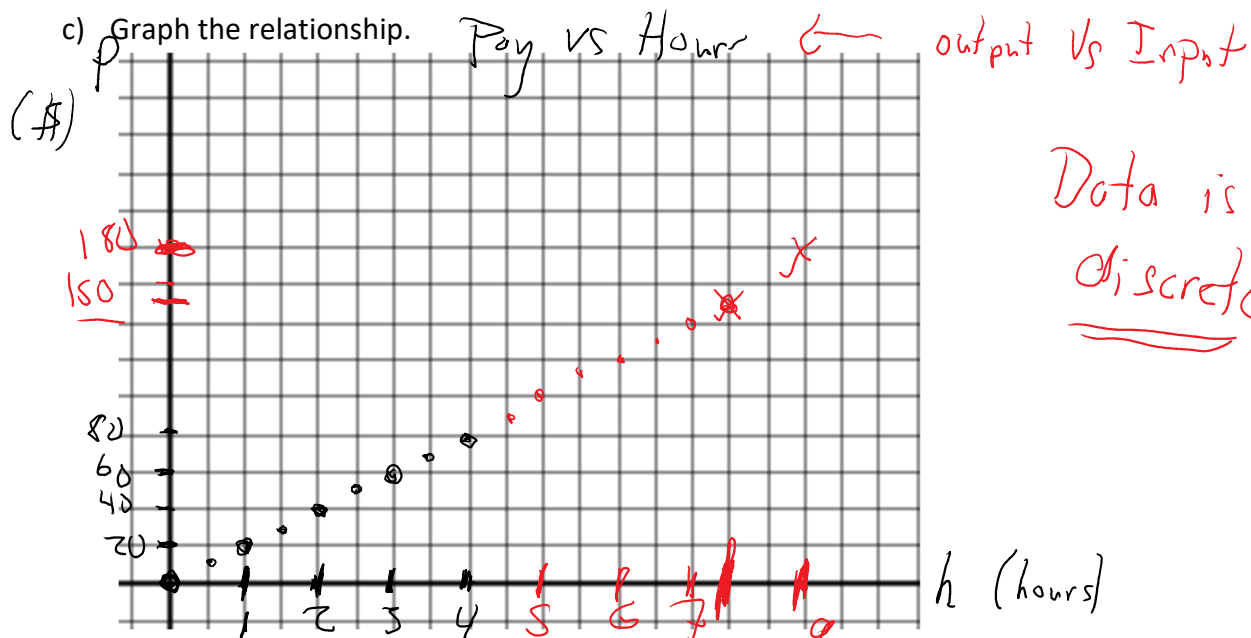
7 or $y = -3(-2) + 1$
 $= 6 + 1$
 $= 7$

Find the value of x when $y = -8$.

3 or $-8 = -3x + 1$
 $-9 = -3x$
 $3 = x$

- b) What is the equation for the relationship.

$p = 20h$



d) What is she paid for 7.5 hours of work? (two methods)

$$P = 20(7.5) = \$150$$

e) How many hours did she work for \$180? two methods)

$$9 \text{ hrs} \quad \frac{180}{20} = \frac{20h}{20} \quad 9 \text{ hrs} = h$$

Ex. Determine the equation of each graph:

