HW 3.1

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a) $\frac{3y}{2}=2x-1$ Y	b) $y=\frac{2x-1}{2x}$ N	c) $y=2\sqrt{x}-4x$ N	d) $y=2x^2-3x+1$ N
e) $2y=2\sqrt{x^2}+1$ N	f) $2y-1=x^2+1$ N	g) $y+2=\frac{-2x+2x^2}{5x}$ N, $x\neq 0$	h) $2xy+1=5x$ N
i) $\frac{5y}{-2}+2x=1$ Y, $y=$	j) $\frac{-4}{3}y+2x-9$ N, no equal sign	k) $\frac{3y-2x}{3}=4$ Y	l) $4xy=3$ N

$\sqrt{x^2}=|x|$

$\sqrt{5^2}=5$ $|5|=5$ $|10|=10$

$\sqrt{(-5)^2}=5$ $|-5|=5$

3. Given the following table of values, find a function that will satisfy it

a)

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

b)

x	-2	3	10.5	15.5
y	1	3	6	8

c)

x	1	3	9	11
y	2	3	6	7

d)

x	-2	1	3	4
y	0.5	-1.75	-3.25	-4

e)

x	0	1	3	4
y	5	2.5	-2.5	-5

f)

x	15	1	3	4
y	13	-1	1	2

a)

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

$2x-3=y$

b)

x	y	2.5y
-2	1	2.5
3	3	7.5
10.5	6	15
15.5	8	20

$x+4.5=2.5y$

c)

x	y
1	2
3	3
9	6
11	7

$y=mx+b$

$2=m+b \rightarrow 2=0.5+b \rightarrow b=1.5$

$7=m(11)+b$ $7=5.5+b \rightarrow b=1.5$

$5=10m$

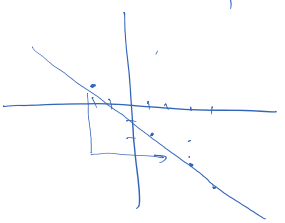
$0.5=m$

d)

x	y
-2	0.5
1	-1.75
3	-3.25
4	-4

$\frac{y-y_1}{x-x_2}=\frac{\text{Rise}}{\text{Run}}$

$\frac{y+4}{x-4}=\frac{0.5+1.75}{-2-1}$



9. The points (x,y) represented in this table lie on a straight line. When the equation of this line is written in the form y=Ax+B, what is the value of A+B?

x	y
2	7
t-2	v
t	v+6

slope must be the same

$\frac{v-7}{(t-2)-2}=\frac{v+6-7}{t-2}=\frac{v+6-v}{t-(t-2)}$

① Find the slope

$\frac{v+6-v}{t-(t-2)}=\text{slope}$

$y=mx+b$

$7=(3)(2)+b$

$1=b$

$\frac{6}{2}=\text{slope}$

$3=\text{slope}$

2 - slope

3 = slope

$y = 3x + 1$

$A = 3 \quad B = 1$