Name _____ Period _____

Patterns and Functions

Complete the tables below and figure out how the input and output values are related in the tables below:

1)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
-1	x + 3 = y	2	(-1, 2)
0			
1			
2			
3			
4			

2)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
4	x – 4 = y	0	(4, 0)
5			
6			
9			
11			
13			

3)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
2		3	(2,3)
0		1	(0,1)
-1		0	(-1,0)
-3			
-4			
-8			

4)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
3		6	(3,6)
4			(4,8)
6		12	6,12)
9			
11			
13		26	

5)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
8		24	(8,24)
9		27	(9,27)
11			
12			
14			
15		45	

6)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
50		52	(50,52)
42		44	(42,44)
40		42	
37			
16			
12			

7)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
1		-3	(1,-3)
2		-2	(2,-2)
4			
6		2	
9			
12			

8)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
2	½ x=y	1	(2,1)
4		-2	(4,-2)
6			
8		4	
12			
20			

9)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
-2		-8	(-2,-8)
-1		-4	
2		8	
4			
5			
10			

10)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
20	$\frac{x}{2} = y$		
30			
50			
60			
80			
100			

11)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
3		7	
4		9	
6		13	
8			
9			
10			

12)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
3		5	
4		7	
5		9	
7			
8			
10			

13)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
	3x + 2 = y	5	
		8	
		11	
		14	
		17	
		20	

14)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
-3		-1	
0		0	
3		1	
6			
9			
12			

15)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
2	½ x + 1 = y	2	
		3	
		4	
		6	
		7	
		8	

16)

	Process (rule)	Output (y)	Coordinates (x,y)
3		6	
4		9	
5		12	
6			
8			
10			

17)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
1		1	
2		4	
3			
4			
5		25	
6			

18)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
1		1	
2		8	
3			
4			
5		125	
7			

19)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
-3		-16	
-2		-12	
-1		-8	
0		-4	
1			
2			

20)

Input (x)	Process (rule)	Output (y)	Coordinates (x,y)
1		-3	
2		-1	
3			
4			
5		5	
6		7	