

1. Analyze how the values in each table change and use any patterns you observe to fill in the last row of each table.

A.

x	f(x)
0	0
1	2
2	4
3	6
4	8

B.

x	g(x)
0	1
1	3
2	9
3	27
4	81

C.

x	h(x)
-2	5
-1	10
0	20
1	40
2	80

D.

x	y
-2	11
-1	8
0	5
1	2
2	-1

E.

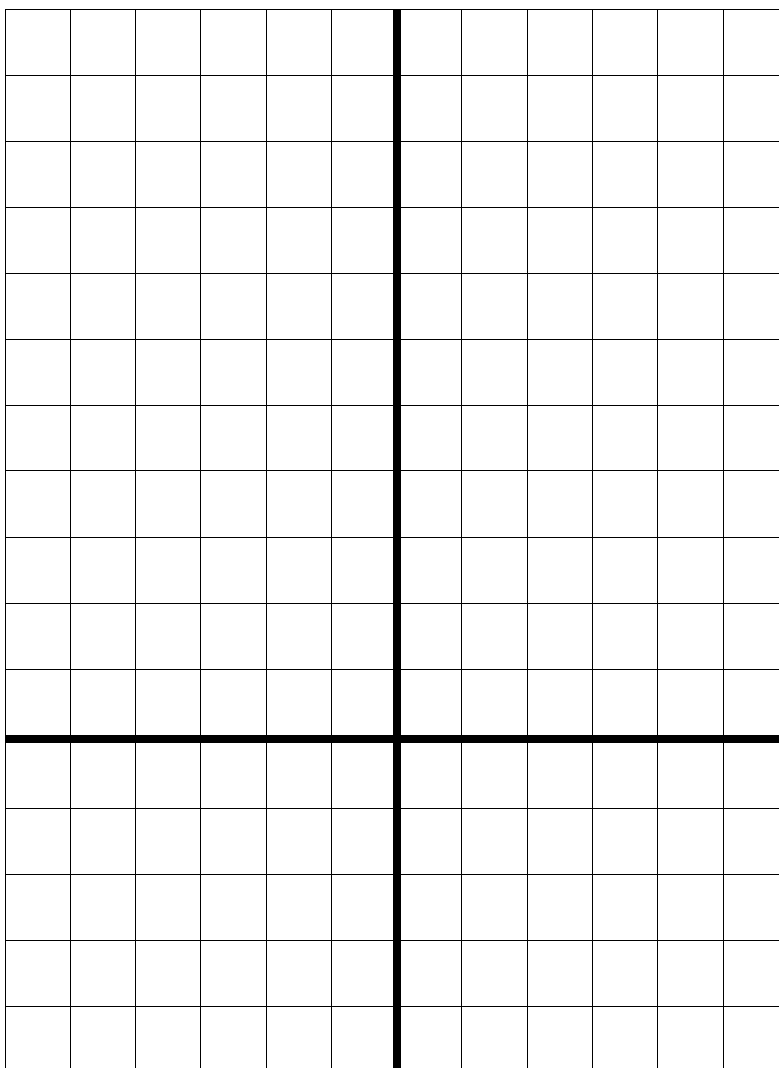
x	r(x)
0	$5/2$
1	2
2	$3/2$
3	1
4	$1/2$

F.

x	d(x)
-2	1
-1	2
0	4
1	8
2	16

- For Table A, how did you know what the next x and $f(x)$ values were? Explain your observations about the change from one value to the next.
- For Table B, how did you know what the next x and $g(x)$ values were? Explain your observations about the change from one value to the next.
- For Table E, how did you know what the next x and $r(x)$ values were? Explain your observations about the change from one value to the next.
- For Table F, how did you know what the next x and $d(x)$ values were? Explain your observations about the change from one value to the next.
- For which Tables did you have to *add* to get to the last value?
- For which Tables did you have to *multiply* to get to the last value?

7. Graph the functions represented by tables A, D and E in the coordinate plane below.



8. What do you notice about all 3 graphs? (What is similar about their shapes?)
9. If you graphed all 6 tables (in question 1), list which tables would have graphs that are increasing and which graphs would be decreasing? (Note: you do NOT have to graph all 6; simply analyze each table of values and state the letter for each table in the appropriate box below.)

Tables with graphs that INCREASE	Tables with graphs that <i>decrease</i>