1.3 ROC in Linear & Quadratic Functions

Date: Hour:

For 1 – 6, selected values for several functions are given in the tables below. For each table of values, determine if the function could be linear, quadratic, or neither. State your reasoning and show work.

١.	. 11
x	f(x)
1	-2
2	-5
3	-5
4	-2
5	4

2		1 1
	x	g(x)
	1	1
1	4	2
(7	4
(10	8
1	_ 13	16

3.	
x	h(x)
. 0	0
2	3
4	7
6	12
8	18
	The second second

known to be compave up or some gown. For each problem, use the datayn the tailing to determine

x	k(x)	.61
0	2	Line
1	3	
4	6	
9	11	
16	18	

up or conceve down. Show work to justify your answer,

	m(20)
x	m(x)
1.2	12.5
1.6	9
2.0	5.5
2.4	2
2.8	-1.5

r	k(r)	- Louis and the same of the sa
1	2	D'VOD
3	3	53
5	6	11/2
7	7	5372
9	10	

For 7-9, the tables below give values of several quadratic functions at selected values of x. For each function, find the value of the constant \boldsymbol{k} in the table.

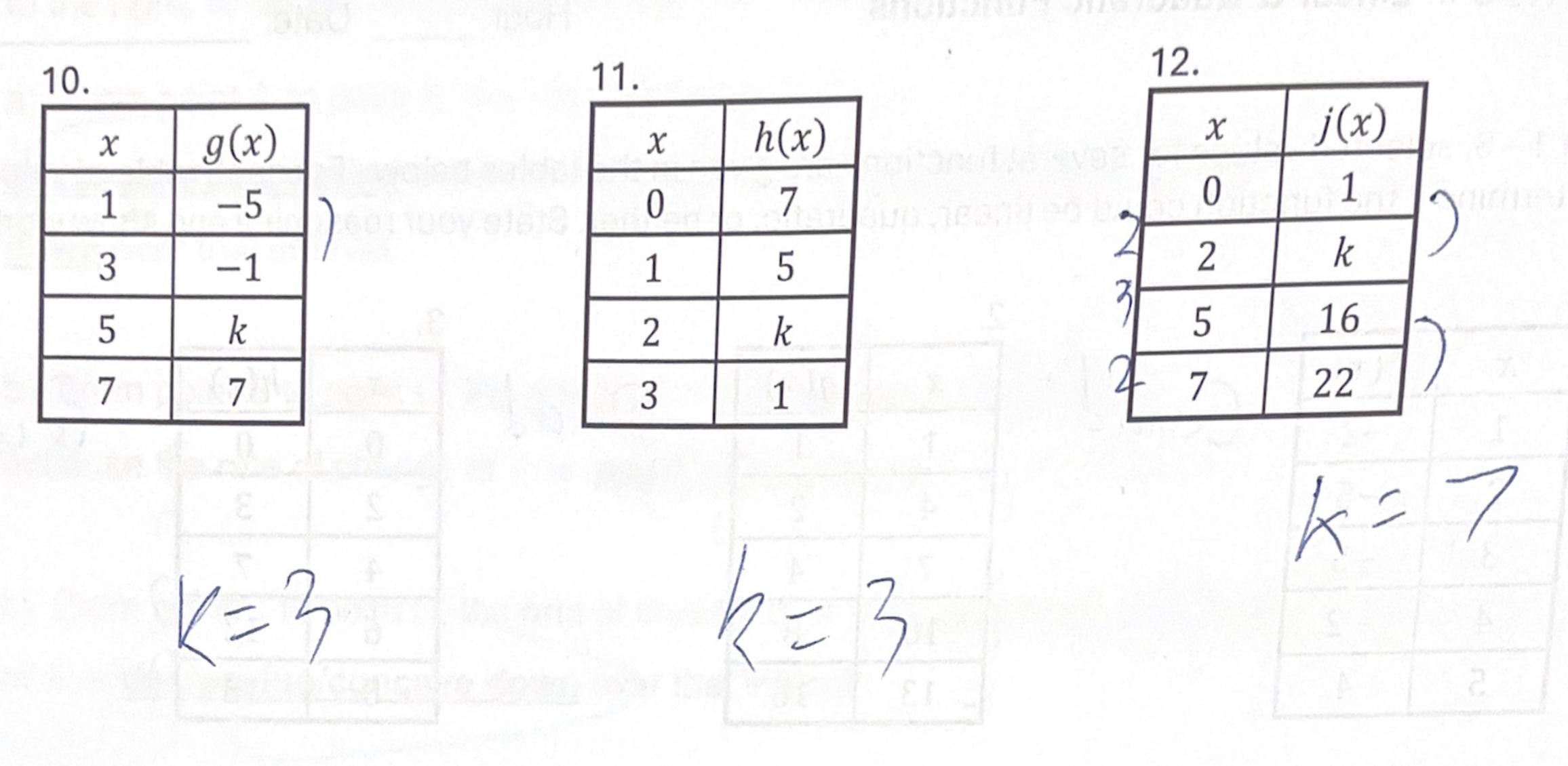
7.			_
	x	p(x)	
T	0	0	SE
	2	5	79
$\sqrt{}$	4	8	$\frac{1}{2}$
1	6	9	
	8	k	

3.	The second section is the second	
x	m(x)	
1	4	5ºC
5	-1	6
9	-4	K
13	k	K
17	-4	P

9

9	•	1 8 8	
	x	f(x)	
/	2.1	-2	his reserve
	2.5	k	6
	2.9	12	74
(3.3	16	70
	3.7	18	12

For 10 - 12, the tables below give values of several linear functions at selected values of x. For ϵ function, find the value of the constant k in the table.



For 13 – 18, selected values for several functions are shown below. The graph of each function is known to be concave up or concave down. For each problem, use the data in the tables to determin if the given function is concave up or concave down. Show work to justify your answer.

13.	The second secon		_1	14.	Elever a strict to send of	- Charles and the contract of the case		15.	
x	f(x)			t	g(t)			x	h(x)
2	1		10	-4	0			0	5
2.5	3		4	0	8	18		1	11
3	6	The second secon	4	4	13	7		2	14
3.5	13		u	8	15	1		3	15
4	23		4	12	16	10.3		4	12
									,
	1/0								donn
				(jon	7			
6.	BELLIOV DE		17	. DUBIL	rent rest		1	8.	For 7 - 9, the tables
x	k(x)			x	p(x)			t	j(t)
1	0		0	11	18)	1	2	22
2	-6			15	10			2.3	20
3	-10			19	5			2.6	15
4	-11			23	3 .			2.9	8
5	_11			27	2			3.2	0
0	-11				And the second second				
20/					1/0		_		
	11	2			VP				1 20
	11				VP				donn