1. [11 points] Let

x	-1	0	1	2	3
$f(x)$	20	35	60	85	100
$g(x)$	192	48	12	3	0.75
$h(x)$	-31	-20	-9	2	13

$$k(x) = 0.3(x-5)^2 - 3$$

a. [9 points] Answer the following questions using the functions given above.

i) Which of the functions could be (or are) linear? Circle all that apply.

$f(x)$ $g(x)$ $h(x)$ $k(x)$ None.

ii) Which of the functions could be (or are) concave up? Circle all that apply.

$f(x)$ $g(x)$ $h(x)$ $k(x)$ None.

iii) Which of the functions could be (or are) exponential? Circle all that apply.

$f(x)$ $g(x)$ $h(x)$ $k(x)$ None.

iv) Which of the functions could be (or are) increasing? Circle all that apply.

$f(x)$ $g(x)$ $h(x)$ $k(x)$ None.

b. [2 points]

p	1	2	3	4	5
W	-2	4	1	3	1
Z	1	3	0	2	4

Given the values of p, W and Z shown in the tables above, which of the following statements could be true? Circle all that apply.

p is a function of W Z is a function of W W is a function of Z None of these