

2. [13 points] The table below contains some information about the functions  $A(w)$ ,  $B(w)$  and  $C(w)$ .

$w$	-1	0	2
$A(w)$	2.5	3	4.32
$B(w)$	1.8	1	-0.6
$C(w)$	5	0	-2.5

There is **exactly one** linear and **exactly one** exponential function.

- a. [7 points] In the following sentences, circle one option when it is indicated and fill in the blanks with the correct value based on the function you circled:

The function  $A(w)$  /  $B(w)$  /  $C(w)$  (**circle one**) is linear.

The slope is   -0.8   and the vertical intercept is   1  .

The function  $A(w)$  /  $B(w)$  /  $C(w)$  (**circle one**) is exponential.

The initial value is   3   and the GROWTH / DECAY (**circle one**) rate is   20  %.

- b. [3 points] Decide which of the functions **could** be **decreasing**. Circle **all** that apply.

$A(w)$        $B(w)$        $C(w)$       None

- c. [3 points] Decide which of the functions **could** be **concave up**. Circle **all** that apply.

$A(w)$        $B(w)$        $C(w)$       None