5. [10 points] The graph of $y=g(x)$ is given below.

a. [6 points] The graphs of the following two functions are related to the graph of $g$. Determine a formula for each graph in terms of the function $g$.


$$
a(x)=
$$

$\qquad$


$$
b(x)=
$$

$\qquad$
b. [4 points] Carefully sketch as much of the function $c(x)$ as will fit on the axes below, where

$$
c(x)=-g(x-1)+2
$$



