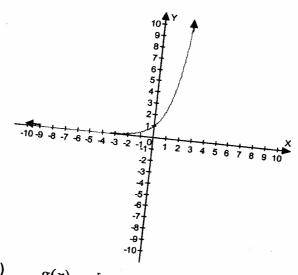
Describe the transformations on the following graph of  $f(x) = e^x$ . State the placement of the horizontal asymptote and *y*-intercept after the transformation. For example, *left 1* or *reflected about the y-axis* are descriptions.



$$a) g(x) = e^x + 2$$

Description of transformation:

Equation(s) for the Horizontal Asymptote(s): y-intercept in (x, y) form:

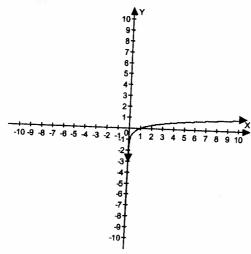
$$b) h(x) = -e^x$$

Description of transformation:

Equation(s) for the Horizontal Asymptote(s):

y-intercept in (x, y) form:

3) Describe the transformations on the following graph of  $f(x) = \log(x)$ . State the placement of the vertical asymptote and x-intercept after the transformation. For example, *left 1* or *stretched vertically by a factor of 2* are descriptions.



a) 
$$g(x) = \log(x-3)$$

Description of transformation:

Equation(s) for the Vertical Asymptote(s): x-intercept in (x, y) form:

$$b) g(x) = \log(-x)$$

Description of transformation:

Equation(s) for the Vertical Asymptote(s):

x-intercept in (x, y) form: