

HR = horizontal reflection

VR = vertical reflection

1. Identify whether $g(x)$ is a horizontal or vertical reflection.

a.

$$f(x) = 2^x$$

$$g(x) = -(2^x)$$

VR

b.

$$f(x) = 2^x$$

$$g(x) = 2^{-x}$$

HR

c.

$$f(x) = 3^x + 7$$

$$g(x) = 3^{-x} + 7$$

HR

d.

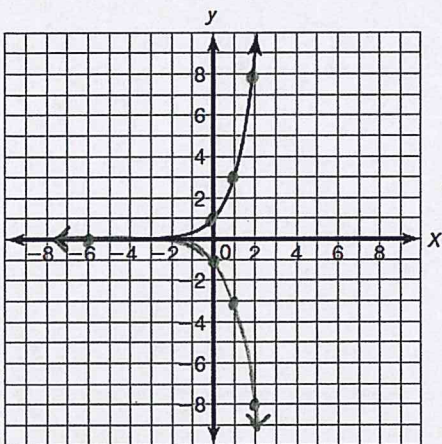
$$f(x) = 4^x - 3$$

$$g(x) = -(4^x - 3)$$

VR

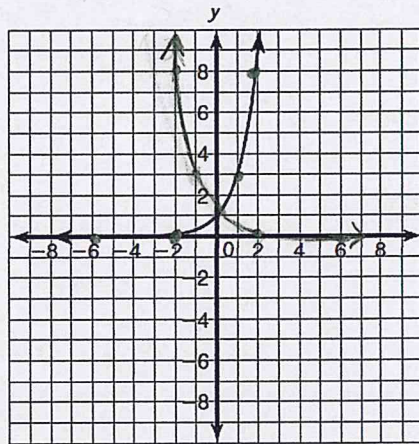
2. The graph of $f(x)$ is shown in each coordinate plane. Sketch the graph of $g(x)$.

a. $g(x) = -f(x)$ VR



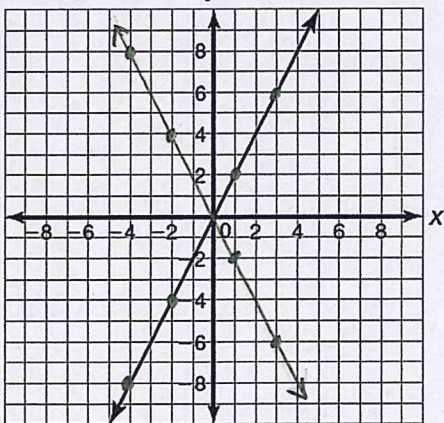
Reflect over the x-axis

b. $g(x) = f(-x)$ HR

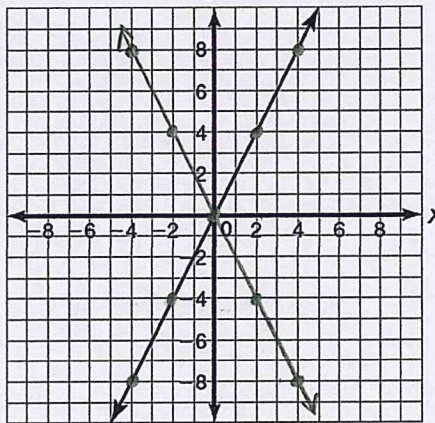


Reflect over the y-axis

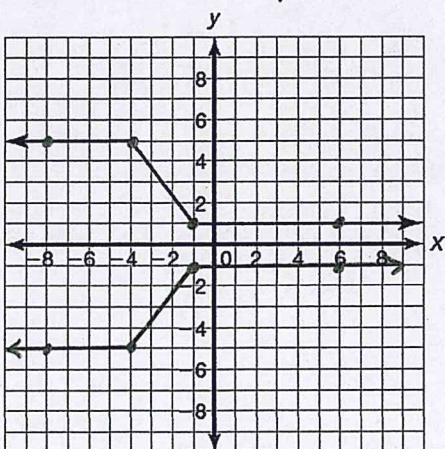
c. $g(x) = -f(x)$ VR



d. $g(x) = f(-x)$ HR



e. $g(x) = -f(x)$ VR



f. $g(x) = f(-x)$ HR

