**1.*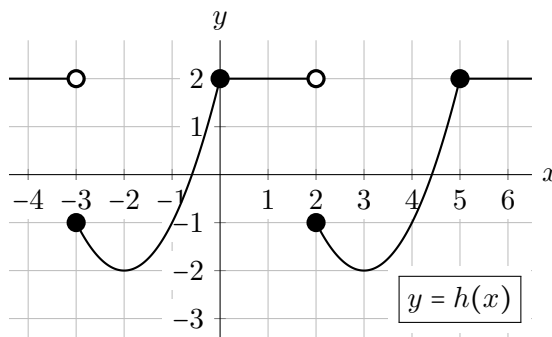* [11 points]   Below is a table of some values for the functions $f(x)$ and $g(x)$, and a partial graph of the function $y = h(x)$, which is periodic with period 5.

x	-5	-3	1	3
$f(x)$	27	18	12	8
$g(x)$	12	15	21	24

For each of the following, completely fill in the circle for **all** correct answers.

a. [2 points] Which of these functions could be linear?

○ $f(x)$ ● $g(x)$ ○ $h(x)$ ○ NONE OF THESE

b. [2 points] Which of these functions could be exponential?

○ $f(x)$ ○ $g(x)$ ○ $h(x)$ ● NONE OF THESE

c. [2 points] Which of these functions could be invertible?

● $f(x)$ ● $g(x)$ ○ $h(x)$ ○ NONE OF THESE

d. [3 points] Find each of the following values exactly, or write NEI if there is not enough information to do so.

$\dfrac{f(3)}{g(3)} = $ ___$\dfrac{1}{3}$___ $g\left(\frac{1}{4}f(3) - 1\right) = $ ___21___ $h(-23) = $ ___-1___

e. [2 points] Find the period of the function $-h\left(\frac{1}{3}x\right)$.

Answer: ___15___