

6. [9 points] The tables below provide data from three functions, f , g , and h . Each of these functions is either a *linear* function, an *exponential* function, a *sinusoidal* function, or a *power* function. (Note that there may be either zero, one, or more than one function of each type.)

x	-2	-1	1	2
f(x)	12	1.5	-1.5	-12

x	-3	-1	1	3
g(x)	12	6.5	1	-4.5

x	1	3	5	7
h(x)	32.4	10.8	3.6	1.2

- a. [3 points] What type of function is f ? (*Circle ONE answer.*)

linear

exponential

sinusoidal

power

Find a formula for $f(x)$. (*Show your work carefully and use exact form.*)

Answer: $f(x) =$ _____

- b. [3 points] What type of function is g ? (*Circle ONE answer.*)

linear

exponential

sinusoidal

power

Find a formula for $g(x)$. (*Show your work carefully and use exact form.*)

Answer: $g(x) =$ _____

- c. [3 points] What type of function is h ? (*Circle ONE answer.*)

linear

exponential

sinusoidal

power

Find a formula for $h(x)$. (*Show your work carefully and use exact form.*)

Answer: $h(x) =$ _____