

7. [10 points] The following table gives some values of the two functions $f(x)$ and $g(x)$.

x	2	8
$f(x)$	20	160
$g(x)$	4	12

- a. [5 points] Suppose the function $f(x)$ is an exponential function. Find a formula for $f(x)$. Your answer must be in **exact form**. Show all your work.

$$f(x) = \underline{\hspace{10cm}}$$

- b. [5 points] Suppose that $g(x)$ is a power function. Find a formula for $g(x)$. Your answer must be in **exact form**. Show all your work.

$$g(x) = \underline{\hspace{10cm}}$$