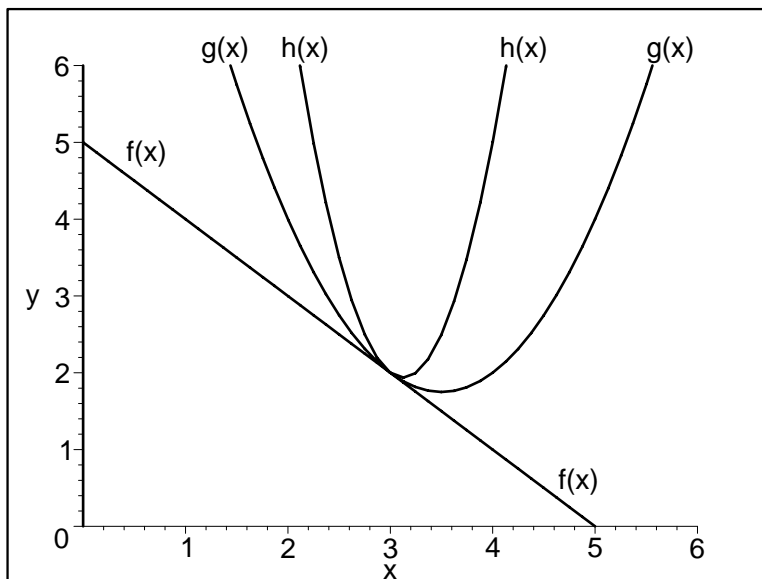


7. (9 pts) Three functions $f(x)$, $g(x)$, and $h(x)$ are graphed below. Propose possible Taylor series centered at $x = 3$ for these three functions. It is important that your formulas for the three be compatible with each other. Include enough terms to distinguish between the functions.



$$f(x) = 2 - (x - 3)$$

$$g(x) = 2 - (x - 3) + (x - 3)^2$$

$$h(x) = 2 - (x - 3) + 4(x - 3)^2$$