Pledge:

I. Use the graphs of the functions f and g to find the indicated limits. For each limit you must show at least one intermediate step for full credit. (2 points each, 4 points total)

1. $\lim\limits_{x\to 2} x^3 f(x)$

2. $\lim\limits_{x\to 1} \dfrac{f(x)}{g(x)}$

Graph of f(x)

Graph of g(x)
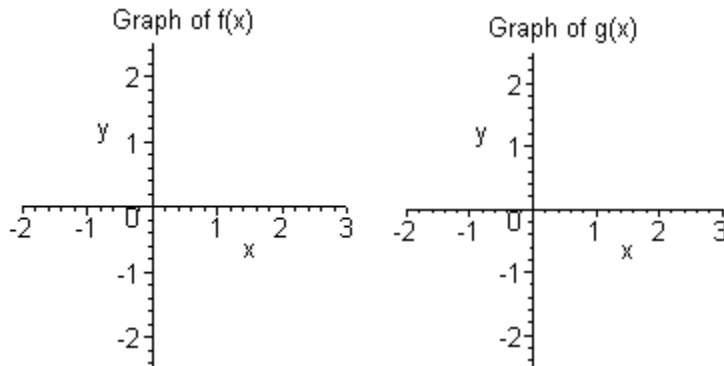
II. Evaluate the following limits. For each limit you must show at least one intermediate step for full credit. (4 points each, 16 points total)

1. $\lim\limits_{t\to 1} \left(t^2+1\right)^3 \left(t+3\right)^2$

2. $\lim\limits_{w\to 1/2} \dfrac{4w^2-1}{1-2w}$

3. $\lim\limits_{x\to 5} \dfrac{x-5}{\sqrt{x+4}-3}$

4. $\lim\limits_{h\to 0} \dfrac{(4+h)^{-1}-4^{-1}}{h}$