

$$f(x) = -9x^4 - 9x^2 - 4x - 9;$$

$$x = -3, 2, -9, 7$$

$$m = \lim_{h \rightarrow 0} \frac{f(c+h) - f(c)}{h}$$

$$M = \lim_{h \rightarrow 0} \frac{[-4(c+h)^4 - 9(c+h)^2 - 4(c+h) - 9] - [-9c^4 - 9c^2 - 4c - 9]}{h}$$

$$\cdot h \rightarrow 0$$

$$= \lim_{h \rightarrow 0} \frac{[-4c^4 + 4(c^2h) - 4(ch^2) + h^4 - 4(c^2 + 2ch + h^2) - 4c + 4h - 9] - [-9c^4 - 9c^2 - 4c - 9]}{h}$$

$$= \lim_{h \rightarrow 0} \frac{[-9c^4 - 4c^2h - 4ch^2 - h^4 - 4c^2 - 4ch]}{h}$$

1

1 1

$$1 2 1 \quad < -a^2 - 4ab + b^2 \rangle$$

$$1 3 3 7 \quad (a^4 - 4a^2b - 4ab^2 - b^4)$$

