$$f(x \pm n\delta) = f^{(0)}(x)\Big[1\Big] + f^{(1)}(x)\Big[\pm n\delta\Big] + f^{(2)}(x)\Big[\frac{n^2\delta^2}{2}\Big] + f^{(3)}(x)\Big[\pm\frac{n^3\delta^3}{6}\Big] + \mathcal{O}\big(\delta^4\big)$$

Five Point Symmetric Stencil:

$$\begin{aligned} f(x) &= f^{(0)}(x) \\ f(x+\delta) - f(x-\delta) &= f^{(1)}(x)\Big[2\delta\Big] + f^{(3)}(x)\Big[\frac{\delta^3}{3}\Big] + \mathcal{O}(\delta^5) \\ f(x+2\delta) - f(x-2\delta) &= f^{(1)}(x)\Big[4\delta\Big] + f^{(3)}(x)\Big[\frac{8\delta^3}{3}\Big] + \mathcal{O}(\delta^5) \end{aligned}$$

$$8\left(f(x+\delta) - f(x-\delta)\right) - \left(f(x+2\delta) - f(x-2\delta)\right) = f^{(1)}(x)\Big[12\delta\Big] + \mathcal{O}(\delta^5) \tag{1}$$

$$f^{(1)}(x) \approx \frac{8\left(f(x+\delta) - f(x-\delta)\right) - \left(f(x+2\delta) - f(x-2\delta)\right)}{12\delta} \tag{2}$$