Q NO1) Compute $f'(1)$ $\therefore h = 0.1$

	x	y
x_{i-2} x_i	1	11
x_{i-1} x_{i+1}	1.1	12.7561
x_i x_{i+2}	1.2	14.8496

Two point forward difference

$$f'(x_i) = \frac{f(x_{i+1}) - f(x_i)}{\Delta x}$$

$$f'(1) = \frac{12.7561 - 11}{0.1}$$

$$\boxed{f'(1) = 17.561}$$

Q NO2) Compute $f'(1.2)$ $\therefore h = 0.1$

Two point backward difference

$$f'(x_i) = \frac{f(x_i) - f(x_{i-1})}{h}$$

$$f'(1.2) = \frac{f(1.2) - f(1.1)}{0.1}$$

$$= \frac{14.8496 - 12.7561}{0.1}$$

$$\boxed{f'(1.2) = 20.935}$$