We know

$$\partial(u.v.w) = v.w.\partial(u) + u.v\,\partial(w) + u.w.\partial(v)$$ (i)

e.g. let take

$$y = (x+1)(x+2)(x+3)$$

$$\frac{\partial y}{\partial x} = (x+2)(x+3)\frac{\partial[(x+1)]}{\partial x} + (x+1)(x+3)\frac{\partial[(x+2)]}{\partial x}$$

$$+ (x+1)(x+2)\frac{\partial[(x+3)]}{\partial x}$$

[using (i) result]

$$\Rightarrow \frac{\partial y}{\partial x} = (x+2)(x+3) + (x+1)(x+3) + (x+1)(x+2)$$

$\Rightarrow$ Similary

take $y = (x+1)(x+2)\cdots(x+2020)$

then $\frac{\partial y}{\partial x} = (x+2)(x+3)\ldots(x+2020)\frac{\partial[(x+1)]}{\partial x} + (x+1)(x+3)\ldots(x+2020)\frac{\partial(x+2)}{\partial x}$

$+ \cdots$

$$\frac{\partial y}{\partial x} = (x+1)(x+3)\ldots(x+2020) + (x+1)(x+3)\ldots(x+2020) + \cdots$$

$$\cdots (x+1)(x+2)\ldots(x+2019)$$