

Q1) (a)

(v) $y = (x + \sin 2x)$

$$\frac{d}{dx} (x + \sin 2x)$$

Apply : $(f \pm g)' = f' \pm g'$ rule

$$= \frac{d}{dx} (x) + \frac{d}{dx} (\sin(2x))$$

$$\frac{d}{dx} (x) = 1$$

$$\frac{d}{dx} (\sin(2x)) = \cos(2x) \times 2$$

$$= \underline{\underline{1 + \cos(2x) \times 2}}$$