

B) $y = \frac{1}{x} + \cos 2x$ find $\frac{d^5 y}{dx^5}$

$y = (\frac{1}{x}) + \cos(2x) \parallel \frac{d^5 y}{dx^5}$

(find 5th derivative?)
if find 5th derivatives
then...

$(\frac{1}{x}) + \cos(2x) \rightarrow \text{first}$

$-\frac{1}{x^2} + (-2\sin(2x)) \quad (d^1)$

$\frac{2}{x^3} - 4\cos(2x) \quad (d^2)$

$-\frac{6}{x^4} + 8\sin(2x) \quad (d^3)$

$\frac{24}{x^5} + 16\cos(2x) \quad (d^4)$

$-\frac{120}{x^6} - 32\sin(2x) \quad (d^5) \xrightarrow{d^5} \text{answer (?)}$