OBO Emmanuel
18/ENG02/065/
Computer ENG
MAT 102

1) $\underline{A} = (6u^2+8)i + (4u-10)j + 8u^3k$

$\underline{B} = (3u)i + (2u-5)j + 5k$

ii) $\underline{A} \cdot B = 3u(6u^2+8) + (4u-10)(2u-5) + 8u^3(+5)$

$= 18u^3 + 24 + 8u^3 - 20u - 20u + 50 + 40u^3$

$= 58u^3 + 8u^2 - 16u + 50$

$\frac{d(A \cdot B)}{du} = 174u^2 + 16u - 16$

$\frac{dA}{du} = 12ui + 4j + 24u^2k$