DCU 1 DMA CV Ονόματα ΣΙΚΑ

① $n+1 = n$

1) $n = 1$: $1+1 = 1$

$2 = 1$

$n+1 = n \;/ +1$

2) $(n+1)+1 = n+1$

$n+2 = n+1$

② 1) $\frac{1}{3} + \frac{1}{2} + \frac{1}{6} = 1$

2) $\frac{1}{3}n^3 + \frac{1}{2}n^2 + \frac{1}{6}n + (n+1)^2 = \frac{1}{3}(n+1)^3 + \frac{1}{2}(n+1)^2 + \frac{1}{6}(n+1)$

$a = \frac{2n^3 + 3n^2 + n + 6n(n+1)^2}{6} = \frac{2n^3 + 9n^2 + 13n + 6}{6}$

$b = \frac{2(n^3 + 3n^2 + 3n + 1) + 3(n^2 + 2n + 1) + 3n + 1}{6}$

$= \frac{2n^3 + 6n^2 + 6n + 2 + 3n^2 + 6n + 3n + 1}{6}$

$= \frac{2n^3 + 9n^2 + 13n + 6}{6}$ $\quad a = b$