

$$u-1=x$$

$$\frac{1}{2} \int_2^3 (u-1)u + e^{(u-1)} du$$

$$\frac{1}{2} \int_2^3 u + e du$$

$$= \frac{1}{2} \int_2^3 (x+1)e$$

$$[(x+1)e]_2^3$$

$$[(3+1)e] - [(2+1)e]$$

$$= 4 + 3 = 7$$