

(14)

$$\int_I \bar{f}_n d(x, y)$$

$$= \frac{1}{n^5} \left(\sum_{k=1}^n k \right) \left(\sum_{l=1}^n l^2 \right)$$

$$= \frac{1}{n^5} \frac{n(n+1)}{2} \frac{n(n+1)(n+2)}{6} \rightarrow \frac{1}{12}$$

$$\int_I \underline{f}_n d(x, y)$$

$$= \frac{1}{n^5} \left(\sum_{k=0}^{n-1} k \right) \left(\sum_{l=0}^{n-1} l^2 \right)$$

$$= \frac{1}{n^5} \frac{(n-1)n}{2} \cdot \frac{(n-1)n(n+1)}{6} \rightarrow \frac{1}{12}$$