

## SUMMASYMBOLIN Σ OMINAISUUKSIA

$$1) \sum_{i=1}^n X_i = X_1 + X_2 + \dots + X_n$$

$$2) \sum_{i=1}^n (X_i + Y_i) = \sum_{i=1}^n X_i + \sum_{i=1}^n Y_i$$

$$3) \sum_{i=1}^n X^i = X^1 + X^2 + \dots + X^n$$

$$4) \sum_{i=1}^n \ln(X_i) = \ln(X_1) + \ln(X_2) + \dots + \ln(X_n)$$

$$5) \sum_{i=1}^n aX_i = a \sum_{i=1}^n X_i$$

$$6) \sum_{i=1}^n a = na$$

$$7) \sum_{i=1}^n iX_i = 1X_1 + 2X_2 + \dots + nX_n$$

$$8) \sum_{i=1}^n X_i Y_i \neq \sum_{i=1}^n X_i \sum_{i=1}^n Y_i$$

$$9) \sum_{i=1}^n X_i^2 \neq \left( \sum_{i=1}^n X_i \right)^2$$

$$10) \sum_{i=1}^n X_i = \sum_{j=1}^n X_j \neq \sum_{j=1}^n X_i = nX_i$$

$$11) \sum_{i=1}^n \sum_{j=1}^m X_{ij} = X_{11} + X_{12} + \dots + X_{1m} + X_{21} + \dots + X_{2m} + \dots + X_{nm}$$