- **Determinant** – is a special set of mathematical operations associated with a square array. The result of the operation is a scalar value.

The determinant below has two rows and two columns and is called a **second-order determinant**.

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix}$$

A second-order determinant is evaluated as follows.

Value of a Second-Order Determinant: $\begin{vmatrix} a & b \\ c & d \end{vmatrix} = ad - bc$

Notice that the value of the determinant is found by calculating the difference of the products of the two diagonals.