




Diagram illustrating the relationship between the square and the plus sign: a square with a curved arrow pointing to a smaller square containing a plus sign, followed by a square with a diagonal line through it, and an equals sign.

A diagrammatic equation showing that the trace of the product of two matrices is equal to the trace of the product in reverse order. On the left, a square with a counter-clockwise arrow is followed by a small square containing a plus sign. On the right, a square with a vertical line through its center is followed by an equals sign.

A diagram illustrating the addition of a vertical line to a square. On the left, a square has a vertical line passing through its center. To its right is a small square containing a plus sign (+). An arrow points from this small square to a larger square. To the right of the larger square is an equals sign (=).

A diagram illustrating the addition of two squares. On the left, a square with a diagonal line from the top-left to the bottom-right is added to a square containing a plus sign. This is followed by an equals sign and a single square, indicating that the sum of these two terms is one square.




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A diagram illustrating the addition of two squares. On the left, a square is enclosed within a larger circle with a clockwise arrow. This is followed by a plus sign in a small square, and then another square enclosed within a larger circle with a clockwise arrow. An equals sign follows.

$$\square + \square + \square =$$

$$\square \oplus \square =$$

A diagram illustrating a mathematical operation. It shows a square, followed by a small square containing a plus sign (+), then another square with a diagonal line through it, and finally an equals sign (=).

Diagram illustrating the addition of a square:

$$\square + \square = \square$$

The diagram illustrates the addition of a square with a horizontal line through its center to a square with a plus sign inside. The result is a square with a curved arrow around its perimeter.

A diagram illustrating the addition of a square to a square. It shows a large square on the left, followed by a small square containing a plus sign, then a large square with a horizontal line through its center, and finally an equals sign.

$$\boxed{\text{---}} \boxed{+} \boxed{\text{---}} = \boxed{\text{---}}$$

$$\begin{array}{|c|} \hline \\ \hline \end{array} \oplus \begin{array}{|c|} \hline + \\ \hline \end{array} = \begin{array}{|c|} \hline \\ \hline \end{array}$$

A diagrammatic equation showing the adjoint of the box operator. On the left, a square box is enclosed in a circle with an arrow pointing clockwise. This is followed by a small square box containing a plus sign. This is then followed by a square box with a vertical line passing through its center. An equals sign follows, indicating the right-hand side of the equation.

The diagram illustrates the addition of a new node to a graph. It shows a square with a diagonal line (representing a node) being added to a square with a plus sign (representing a graph). The result is a square with a horizontal line (representing the updated graph).

A diagrammatic equation showing the addition of a box to a vertical line. On the left, a vertical line passes through a square box. This is followed by a plus sign and a small square box containing a plus sign. An arrow points from this small box to a larger square box. This is followed by an equals sign and a square box with a horizontal line passing through its center.

$$\square_{\diagdown} + \square_{\diagdown} = \square$$

$$\square_{\diagdown} + \square_{\diagdown} = \square$$

A diagram illustrating the addition of a vertical line to a square with a diagonal line. On the left, a square has a diagonal line from the top-left to the bottom-right. This is followed by a small square containing a plus sign (+). Then, a square has a curved arrow pointing from its bottom-right corner towards the right. This is followed by an equals sign (=) and a final square with a vertical line passing through its center.

A diagram illustrating a transformation. On the left, a square is shown with a curved arrow pointing from its bottom-right corner to a small square containing a plus sign (+). This is followed by an equals sign (=). To the right of the equals sign is a square with a horizontal line passing through its center. The original square with a diagonal line is shown to the left of the equals sign, indicating it is being added to the plus sign square.

A diagram illustrating a transformation. On the left, a square has a diagonal line from the bottom-left to the top-right. To its right is a small square containing a plus sign (+). Further right is a square with a vertical line passing through its center. An equals sign (=) follows, and on the far right is a square with a curved arrow starting from the top-right corner and pointing upwards and to the right.

The diagram shows a large square on the left, which is partitioned by a vertical line into two smaller squares. To the right of this large square is a small square containing a plus sign (+). To the right of the plus sign is another square, which is circled. An equals sign (=) follows, and to the right is a single large square. Arrows indicate the relationship: one arrow points from the left square to the plus sign, another from the plus sign to the circled square, and a third from the circled square to the final square. This represents the equation: (Square 1 + Square 2) * Square 3 = (Square 1 * Square 3) + (Square 2 * Square 3).

A diagram illustrating the addition of a square and a square with a diagonal line through it. It shows a square followed by a small square containing a plus sign, then a square with a diagonal line through it, followed by an equals sign, and finally a square with a diagonal line through it.

The diagram illustrates a step in the simplification of a matrix. It shows a square with a diagonal line through it, followed by a small square containing a plus sign, then another square with a diagonal line. This is followed by an equals sign and a square with a curved arrow pointing from the top-right corner to the bottom-left corner, representing a permutation or a specific transformation.

A diagram illustrating the addition of two squares. On the left, there are two identical squares, each with a diagonal line running from the bottom-left corner to the top-right corner. These two squares are followed by a plus sign (+). To the right of the plus sign is another square with a diagonal line from the bottom-left to the top-right corner. This is followed by an equals sign (=). To the right of the equals sign is a single square without any diagonal line.

A diagram illustrating the addition of two squares. On the left, there are two identical squares, each with a diagonal line running from the bottom-left corner to the top-right corner. These two squares are followed by a plus sign (+) inside a small square. To the right of the plus sign is another square with a diagonal line from the bottom-left to the top-right corner. This is followed by an equals sign (=). To the right of the equals sign is a single square without any diagonal line.

A diagram illustrating a mathematical operation. On the left, a square with a diagonal line from the top-left to the bottom-right is added to a square containing a plus sign. This is followed by an equals sign, and then a square with a horizontal line passing through its center. A curved arrow points from the square with the plus sign to the square with the horizontal line.

The diagram illustrates the addition of a square to a square with a self-loop. On the left, there is a square followed by a small square containing a plus sign, then a square with a self-loop. An equals sign follows, and then another square with a self-loop. This represents the equation: $\square + \square = \square$ where the squares on the right have a self-loop.

A diagram illustrating the addition of a square with a plus sign to a square with a curved arrow. The first square has a curved arrow pointing from the top to the bottom. This is followed by a plus sign in a small square, then an equals sign, and finally a second square with a curved arrow pointing from the top to the bottom.

A diagrammatic equation showing the trace of a product of two matrices. On the left, a square with a counter-clockwise circular arrow around it is multiplied by a square containing a plus sign. This is equal to a square with a horizontal line through its center, which is equal to a square with a diagonal line from the bottom-left to the top-right corner.

The diagram illustrates the addition of a horizontal line to a square. On the left, a square has a horizontal line passing through its center. This is followed by a small square containing a plus sign (+). To the right of the plus sign is a square with a curved arrow pointing from its top-right corner to its bottom-left corner. This entire sequence is followed by an equals sign (=) and a final square with a diagonal line running from the top-left corner to the bottom-right corner.

A diagram illustrating a relationship between four symbols: a square, a plus sign, a square with a horizontal line, and a square with a diagonal line. The symbols are arranged in a sequence: a square, followed by a plus sign, then a square with a horizontal line, followed by an equals sign, and finally a square with a diagonal line. An arrow points from the top-right corner of the first square to the plus sign.

$$\square_{\text{with vertical line}} \square_{\text{with } +} \square_{\text{with vertical line}} = \square$$

$$\square \text{ with vertical line} \quad \square \text{ with } + \quad \square \text{ with vertical line} = \square$$

A diagrammatic equation showing that the square of the identity operator is equal to the identity operator. On the left, there is a square box with a vertical line passing through its center, representing the identity operator. This is followed by a small square box containing a plus sign, representing the square of the identity operator. This is then followed by an equals sign. To the right of the equals sign is another square box with a vertical line passing through its center, representing the identity operator.

A diagrammatic equation showing the square of the identity operator. On the left, a square with a counter-clockwise arrow on its top edge is followed by a small square containing a plus sign. This is followed by an equals sign. To the right of the equals sign is a square with a diagonal line from the top-left to the bottom-right corner.