

The diagram illustrates the multiplication of two matrices, A and B , to produce matrix C . Matrix A is a 3x3 matrix with columns colored black, green, red, and blue. Matrix B is a 3x4 matrix with rows colored black, green, red, and blue. Matrix C is a 3x3 matrix resulting from the multiplication. The diagram highlights the calculation of the top-left element of C , which is the dot product of the first column of A and the first row of B . The result is a 3x3 matrix where the first row is black, the second row is green, and the third row is red.

The diagram illustrates the multiplication of two matrices, A and B , to produce matrix C . Matrix A is a 3x4 matrix with columns colored black, green, red, and blue. Matrix B is a 4x5 matrix with rows colored black, green, red, and blue. The product C is a 3x5 matrix with columns colored black, green, red, blue, and grey. The green column of A is multiplied by the green row of B , resulting in the green column of C .

The diagram illustrates the multiplication of two matrices, A and B , to produce matrix C . Matrix A (top) has dimensions 3×4 and matrix B (bottom) has dimensions 4×3 .

Matrix A:

- Row 1: 1 black square, 1 green square, 1 red square, 1 blue square.
- Row 2: 1 black square, 1 green square, 1 red square, 1 blue square.
- Row 3: 1 black square, 1 green square, 1 red square, 1 blue square.

Matrix B:

- Column 1: All squares are black.
- Column 2: All squares are green.
- Column 3: All squares are red.
- Column 4: All squares are blue.

Matrix C (Result):

- Row 1: All squares are black.
- Row 2: All squares are green.
- Row 3: All squares are red.
- Row 4: All squares are blue.

Matrix Addition:

On the left, there is a plus sign ($+$) followed by a row of six empty boxes. This indicates that the result of the multiplication is being added to another matrix (not shown).

The diagram illustrates the multiplication of two matrices, A and B , to produce matrix C . Matrix A (top) has dimensions 3×4 and matrix B (bottom) has dimensions 4×3 .

Matrix A (Top Row):

Black	Green	Red	Blue
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Matrix B (Left Column):

Black	Green	Red	Blue
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Matrix C (Result):

Black	Green	Red	Blue
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Matrix A (Second Row):

Black	Green	Red	Blue
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Matrix B (Middle Column):

Black	Green	Red	Blue
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Matrix C (Second Row):

Black	Green	Red	Blue
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Matrix A (Third Row):

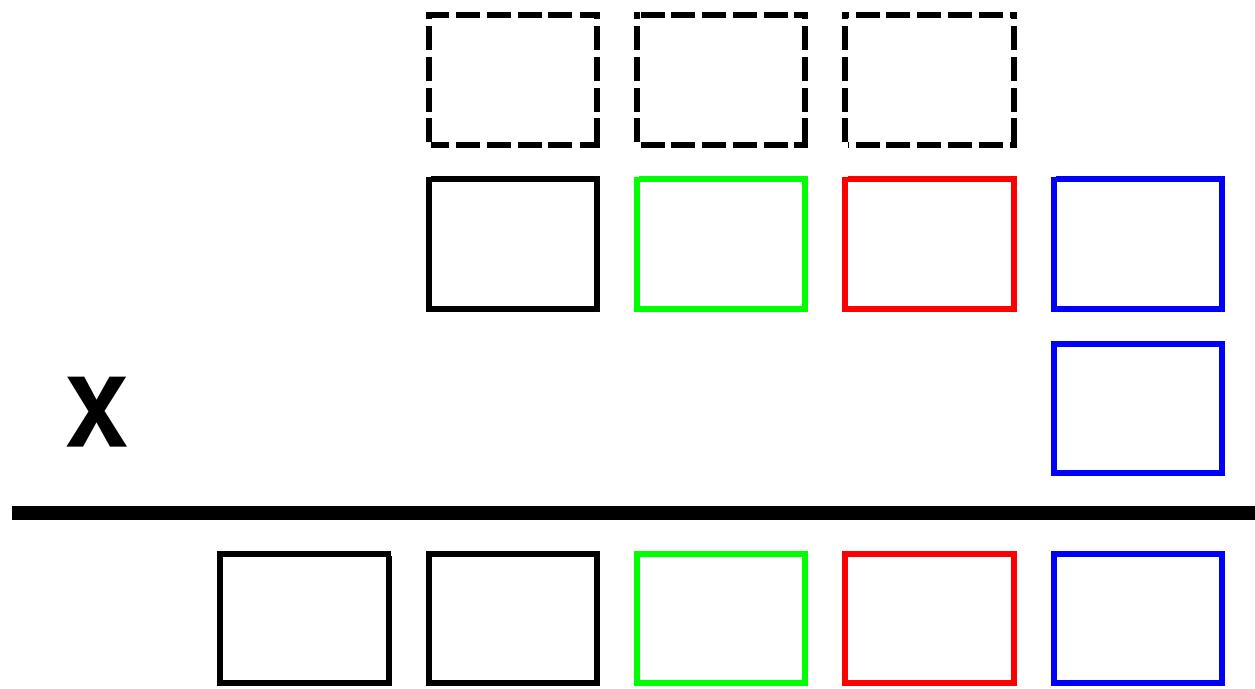
Black	Green	Red	Blue
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Matrix B (Right Column):

Black	Green	Red	Blue
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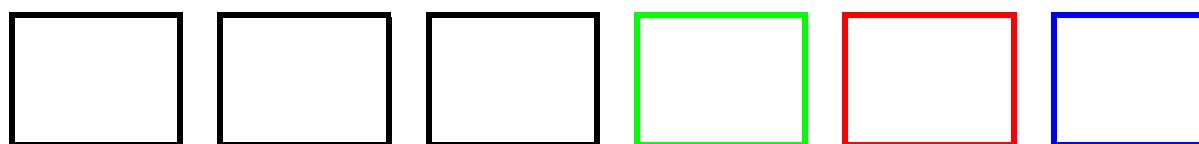
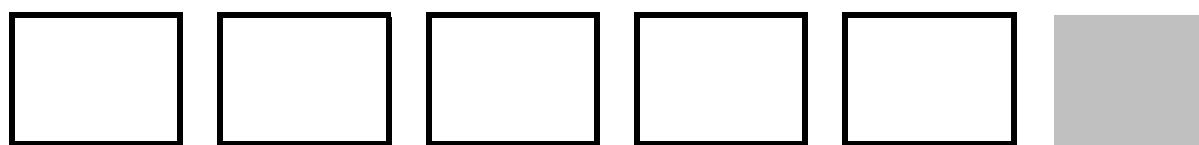
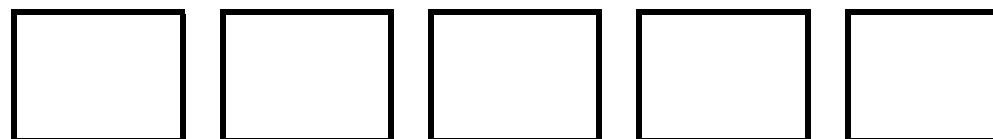
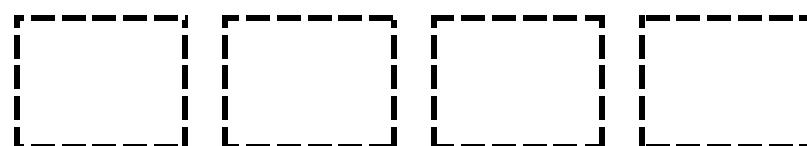
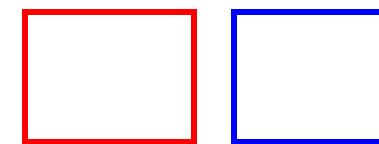
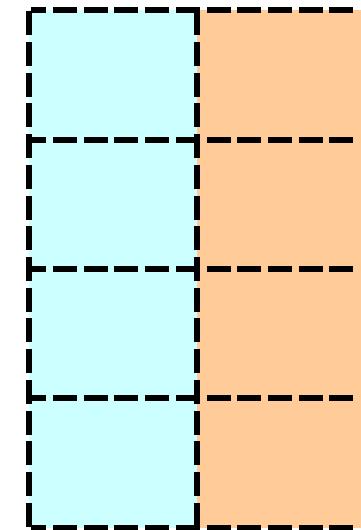
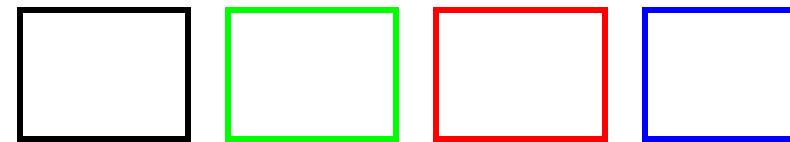
Matrix C (Third Row):

Black	Green	Red	Blue
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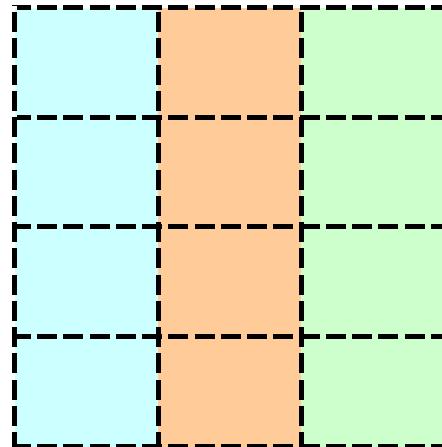
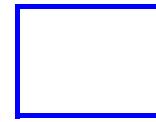
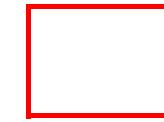
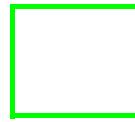
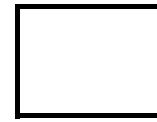
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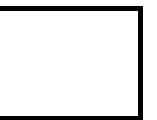
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A row of seven square outlines. The first four are black with black outlines. The fifth is green with a green outline. The sixth is red with a red outline. The seventh is blue with a blue outline.

