$$\begin{bmatrix} 0 & 2 & 3 \\ 8 & 7 & 6 \\ 1 & 4 & 2 \end{bmatrix} \times \begin{bmatrix} 2 & 4 & 1 \\ 7 & 2 & 8 \\ 6 & 3 & 0 \end{bmatrix} = \begin{bmatrix} 33 & 13 & 16 \\ 101 & 64 & 64 \\ 42 & 18 & 33 \end{bmatrix}$$

$$(1,1) = 0(2) + 2(7) + 3(6) = 32 \tag{1}$$
$$(1,2) = 0(4) + 2(2)(3)3 = 13 \tag{2}$$
$$(1,3) = 0(1) + 2(8) + 3(0) = 16 \tag{3}$$
$$\tag{4}$$
$$(2,1) = 8(2) + 7(7) + 6(6) = 101 \tag{5}$$
$$(2,2) = 8(4) + 7(2) + 6(3) = 64 \tag{6}$$
$$(2,3) = 8(1) + 7(8) + 6(0) = 64 \tag{7}$$
$$\tag{8}$$
$$(3,1) = 1(2) + 4(7) + 2(6) = 42 \tag{9}$$
$$(3,2) = 1(4) + 4(2) + 2(3) = 18 \tag{10}$$
$$(3,3) = 1(1) + 4(8) + 2(0) = 33 \tag{11}$$