\*\*Multiply rows times columns.

\*\*You can only multiply if the number of columns in the 1st matrix is equal to the number of rows in the 2nd matrix.

A = $\left[\begin{matrix}-3&2&5\\7&1&0\end{matrix}\right]$ B = $\left[\begin{matrix}-8&2\\1&5\\0&-3\end{matrix}\right]$

 They must match

Dimensions: 2 x 3 3 x 2

 Dimensions of Answer

$\left[\begin{matrix}-3\left(-8\right)+2\left(1\right)+5(0)&-3\left(2\right)+2\left(5\right)+5(-3)\\7\left(-8\right)+1\left(1\right)+0(0)&7\left(2\right)+1\left(5\right)+0(-3)\end{matrix}\right]$

$$\left[\begin{matrix}26&-11\\-55&19\end{matrix}\right]$$

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