Matrix Variety **Name: _____**

 Period:

Use these matrices to perform the indicated functions and answer the problems below.

$$E = \begin{bmatrix} 2 & 5 \\ 6 & -5 \end{bmatrix} \qquad F = \begin{bmatrix} 7 & -5 & 0 \\ 1 & 3 & -2 \end{bmatrix} \qquad D = \begin{bmatrix} -3 & -2 \\ 0 & 1 \\ 5 & 4 \end{bmatrix}$$

$$A = \begin{bmatrix} 6 & 2 \\ -7 & 8 \\ 10 & 1 \end{bmatrix} \qquad C = \begin{bmatrix} 3 & -3 \\ -4 & 0 \end{bmatrix} \qquad B = \begin{bmatrix} -12 & 4 & 1 \\ 0 & -2 & 8 \end{bmatrix}$$

1) Calculate E + C

2) Calculate B – F

3) Calculate DC

4) Calculate AC

5) Using complete sentences, explain why it is impossible to calculate FC.

6) Using complete sentences, explain why it is possible to calculate AB.

7) For problem #6, what will be the dimensions of AB?

8) Provide an example when two multiplied matrices will have a solution that is 5x2.