Reading the Lesson

1. For each pair of matrices, give the dimensions of the indicated sum, difference, or scalar product. If the indicated sum, difference, or scalar product does not exist, write *impossible*.

$A = \begin{bmatrix} 3 & 5 & 6 \\ -2 & 8 & 1 \end{bmatrix}$ $B = \begin{bmatrix} -4 & 0 \\ 0 & -5 \end{bmatrix}$ AB = _____

$C = \begin{bmatrix} 5 & 10 \\ -3 & 6 \\ 4 & 12 \end{bmatrix}$ $D = \begin{bmatrix} -3 & 6 & 0 \\ -8 & 4 & 0 \end{bmatrix}$ BC = _____

$A + D$: _____ $C + D$: _____ $5B$: _____

$-4C$: _____ $2D - 3A$: _____ CD = _____

AB, BC, CD are all MULTIPLICATION problems!!!