

Page 7

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iii) $A \begin{pmatrix} 8 & -1 & 7 \\ -5 & 2 & 5 \\ 3 & 0 & 2 \end{pmatrix} \quad C \begin{pmatrix} 2 & 5 \\ -6 & 0 \\ 1 & 12 \end{pmatrix}$
 $3 \times 3 \quad 3 \times 2$
 cannot multiply

iv) ~~$CA \quad C \begin{pmatrix} 2 & 5 \\ -6 & 0 \\ 1 & 12 \end{pmatrix} \quad A \begin{pmatrix} 8 & -1 & 7 \\ 5 & 2 & 5 \\ 3 & 0 & 2 \end{pmatrix}$~~
 ~~$2 \times 3 \quad 3 \times 3$~~
~~cannot multiply~~

$AC \begin{pmatrix} 16+6+7 & 40+0+84 \\ -10+12+5 & -25+0+60 \\ 6+0+2 & 15+0+24 \end{pmatrix}$
 $AC \begin{pmatrix} 29 & 124 \\ -17 & 45 \\ 8 & 39 \end{pmatrix}$

iv) $CA \quad C \begin{pmatrix} 2 & 5 \\ -6 & 0 \\ 1 & 12 \end{pmatrix} \quad A \begin{pmatrix} 8 & -1 & 7 \\ 5 & 2 & 5 \\ 3 & 0 & 2 \end{pmatrix}$
 $2 \times 3 \quad 3 \times 3$
 cannot multiply

v) $A \begin{pmatrix} 8 & -1 & 7 \\ -5 & 2 & 5 \\ 3 & 0 & 2 \end{pmatrix}$
 $|A| = 8(2 \times 0 - 0) - (-1)(15 - 10) + 7(6 - 0)$
 $= 8(0) + 1(5) + 7(6)$
 $= 24 + 5 + 42 = \underline{\underline{71}}$