

$$\begin{bmatrix} 1 & 2 & 4 \\ -3 & 1 & 5 \end{bmatrix} \begin{matrix} 2 \times 3 \\ \textcircled{2} \times 3 \end{matrix} \times \begin{bmatrix} 1 & 2 & 3 \\ 2 & 4 & 5 \\ 3 & -2 & -1 \end{bmatrix} \begin{matrix} 3 \times 3 \\ \textcircled{3} \times 3 \end{matrix} = \begin{bmatrix} \square & 2 & 9 \\ -4 & -12 & -9 \\ -2 & 2 & -3 \end{bmatrix} \begin{matrix} 1+4+12 & 2+8+8 & 3+10+4 \\ 1,1 & 1,2 & 1,3 \\ 2,1 & 2,2 & 2,3 \end{matrix} \quad \text{EXAMPLE}$$

INSIDE NUMBERS MUST MATCH UP FOR MULTIPLICATION OF MATRICES TO WORK; IF inside numbers do not match MULTIPLICATION CANNOT BE DONE!!

PMNTS @ END ORDINARY ANNUITY

PMNTS @ BEGINNING ANNUITY/DUE

How much do I need in an account to withdraw \$350 @ the beginning of each month for 15 yrs if the account pays 7.2%?

Present Value - Annuity Due
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 Beginning

If I put \$350 into an account paying 7.2% @ the end of each month for 15 yrs, how much will I have?

Future Value Ordinary Annuity
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 End