$\qquad$ Date $\qquad$ Pd $\qquad$
CYU 1.5.2 Multiplying Matrices DAY ONE
$\square$ Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
HUse when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :---: | :---: | :---: | :---: |
| Multiplying Matrices | $2,7,8$ | $1,3,4,10$ | $5,6,9,11-14$ |

Multiply each set of matrices, if possible. If not possible, show why the matrices cannot be multiplied and write undefined.

1. $\left[\begin{array}{cc}0 & 2 \\ -2 & -5\end{array}\right] \cdot\left[\begin{array}{cc}6 & -6 \\ 3 & 0\end{array}\right]$
2. $\left[\begin{array}{c}6 \\ -3\end{array}\right]\left[\begin{array}{ll}-5 & 4\end{array}\right]$
3. $\left[\begin{array}{cc}-5 & -5 \\ -1 & 2\end{array}\right] \cdot\left[\begin{array}{cc}-2 & -3 \\ 3 & 5\end{array}\right]$
4. $\left[\begin{array}{ll}-3 & 5 \\ -2 & 1\end{array}\right] \cdot\left[\begin{array}{ll}6 & -2 \\ 1 & -5\end{array}\right]$
5. $\left[\begin{array}{cc}0 & -5 \\ -3 & 1 \\ -5 & 1\end{array}\right]\left[\begin{array}{cc}-4 & 4 \\ -2 & -4\end{array}\right]$
6. $\left[\begin{array}{lll}5 & 3 & 5 \\ 1 & 5 & 0\end{array}\right] \cdot\left[\begin{array}{cc}-4 & 2 \\ -3 & 4 \\ 3 & -5\end{array}\right]$
7. $\left[\begin{array}{c}-5 \\ 6 \\ 0\end{array}\right]\left[\begin{array}{ll}3 & -1\end{array}\right]$
8. $\left[\begin{array}{lll}3 & 2 & 5 \\ 2 & 3 & 1\end{array}\right] \cdot\left[\begin{array}{ccc}4 & 5 & -5 \\ 5 & -1 & 6\end{array}\right]$
9. $\left[\begin{array}{cc}3 & -1 \\ -3 & 6 \\ -6 & -6\end{array}\right]\left[\begin{array}{cc}-1 & 6 \\ 5 & 4\end{array}\right]$
10. $\left[\begin{array}{cc}5 & 4 \\ 2 & -1\end{array}\right]\left[\begin{array}{c}-4 \\ 3\end{array}\right]$
11. $\left[\begin{array}{cc}2 & -5 v\end{array}\right] \cdot\left[\begin{array}{cc}-5 u & -v \\ 0 & 6\end{array}\right]$
12. $\left[\begin{array}{cc}-4 & -y \\ -2 x & -4\end{array}\right]\left[\begin{array}{cc}-4 x & 0 \\ 2 y & -5\end{array}\right]$
13. Write an example of a matrix multiplication that is undefined.
14. In the expression $A \cdot B$, if $A$ is a $3 \times 5$ matrix then what could be the dimensions of $B$ ?

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.


