

Name: ANSWER KEY

Score: \_\_\_\_\_

Perform the matrix multiplication:

$$\begin{pmatrix} 2 & 1 & 0 & -3 \\ -7 & 0 & -2 & 4 \end{pmatrix} \cdot \begin{pmatrix} 4 & -2 & 0 \\ 1 & 1 & -2 \\ 0 & 0 & 5 \\ -3 & -1 & 0 \end{pmatrix} = \begin{pmatrix} 8+1+0+9 & -4+1+0+3 & 0-2+0+0 \\ -28+0+0-12 & 14+0+0-4 & 0+0-10+0 \end{pmatrix}$$

$$2 \times \textcircled{4} \quad \text{OK} \quad \textcircled{4} \times 3$$

$\therefore 2 \times 3$

$$= \boxed{\begin{pmatrix} 18 & 0 & -2 \\ -40 & 10 & -10 \end{pmatrix}}$$