

Name : \_\_\_\_\_

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

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

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### Matrix Inverses

State whether each matrix has an inverse.

1)  $\begin{bmatrix} -3 & 5 \\ -2 & 4 \end{bmatrix}$

2)  $\begin{bmatrix} -5 & -20 \\ 2 & 8 \end{bmatrix}$

3)  $\begin{bmatrix} -6 & -5 \\ 5 & 4 \end{bmatrix}$

4)  $\begin{bmatrix} -5 & -6 \\ 6 & -2 \end{bmatrix}$

5)  $\begin{bmatrix} 4 & -3 \\ -2 & -2 \end{bmatrix}$

6)  $\begin{bmatrix} -6 & 0 \\ 4 & -6 \end{bmatrix}$

Find the inverse of each matrix, or "No inverse exists" if no inverse matrix exists.

7)  $\begin{bmatrix} -1 & -3 \\ 3 & 1 \end{bmatrix}$

8)  $\begin{bmatrix} -5 & 4 \\ 2 & -1 \end{bmatrix}$

9)  $\begin{bmatrix} 2 & -5 \\ -4 & -5 \end{bmatrix}$

10)  $\begin{bmatrix} 4 & 3 \\ 5 & 0 \end{bmatrix}$

11)  $\begin{bmatrix} 5 & 2 \\ 1 & 5 \end{bmatrix}$

12)  $\begin{bmatrix} -1 & -3 \\ 0 & 0 \end{bmatrix}$

