

Name \_\_\_\_\_

Date \_\_\_\_\_

### Advanced Algebra

### Unit 6: Advanced Systems- Matrices Assignment #2

Find the value of the missing variables:

$$1) \begin{bmatrix} x^2 & 4z \\ 25 & 8 \end{bmatrix} = \begin{bmatrix} 100 & 28 \\ 5a & 4s \end{bmatrix}$$

$$2) \begin{bmatrix} x^{\frac{1}{2}} & 8y \\ 612 & 5x \end{bmatrix} = \begin{bmatrix} 28 & 32 \\ z^5 & 500 \end{bmatrix}$$

$$\textcircled{1} \begin{bmatrix} 10 & 7 \end{bmatrix}$$

$$\begin{matrix} x=10 & a=5 \\ z=7 & s=2 \end{matrix}$$

Add/Subtract the following matrices:

$$\begin{bmatrix} 5 & -2 \\ 5 & 12 \end{bmatrix} - \begin{bmatrix} -2 & 8 \\ 3 & 12 \end{bmatrix} =$$

$$\textcircled{2} \begin{matrix} x^{\frac{1}{2}} \\ x=28 \end{matrix}$$

$$x=784$$

$$y=4$$

Multiply the following Matrix by a scalar, then add.

$$\begin{bmatrix} 12 & 5 \\ 2 & 4 \end{bmatrix} + 3 \begin{bmatrix} 4 & -3 \\ 2 & 1 \end{bmatrix} =$$

$$z=3.6$$

$$x=1w$$

$$\begin{bmatrix} 7 & -10 \\ 2 & 0 \end{bmatrix}$$

$$\begin{bmatrix} 12 & 5 \\ 2 & 4 \end{bmatrix} + \begin{bmatrix} 12 & -9 \\ 6 & 3 \end{bmatrix} = \begin{bmatrix} 24 & -4 \\ 8 & 7 \end{bmatrix}$$