

## Unit 3: Matrices

## Lesson 6: Inverse of Matrices (part3)

EQ:

## Part III: Using the Determinant to Find the Inverse

Given  $A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$  \_\_\_\_\_ = \_\_\_\_\_  $\begin{bmatrix} \text{---} & \text{---} \\ \text{---} & \text{---} \end{bmatrix}$

Matrix A has an \_\_\_\_\_ iif \_\_\_\_\_ WHY?

❖ Ex. Find the inverse using the determinant. How can you verify your answer is correct?

1)  $A = \begin{bmatrix} 6 & 2 \\ -3 & 1 \end{bmatrix}$

2)  $J = \begin{bmatrix} 13 & 8 \\ -5 & 3 \end{bmatrix}$

3)  $K = \begin{bmatrix} 6 & 2 \\ 9 & 3 \end{bmatrix}$

❖ Assignment: Practice Worksheet 4.3 #7 - 18