

QUIZ NUMBER ONE FOR MTH 221 AT 1:00 PM

AYMAN BADAWI

Name _____, Id. Num. _____, Score $\frac{\quad}{15}$

QUESTION 1. Given the following augmented matrix:

$$\begin{bmatrix} 0 & 1 & -5 & b & 6 \\ 1 & 0 & 4 & 6 & 10 \\ -3 & 0 & -12 & c & d \end{bmatrix}$$

(1) For what values of b, c, d will the system have infinitely many solutions?

(2) For what values of b, c, d will the system have *UNIQUE SOLUTION*?

(3) For what values of b, c, d will the system be inconsistent?

QUESTION 2. Let $A = \begin{bmatrix} 3 & 2 \\ -6 & -1 \\ 0 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} -6 & 1 & 0 \\ 0 & -1 & -3 \end{bmatrix}$ Find AB .

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