Question 1 *True/False. Every matrix has an inverse.*

Multiple Choice:

(a) *True*

(b) *False* ✓

Question 2 *If A and B are invertible, then:*

Multiple Choice:

(a) $(AB)^{-1} = A^{-1}B^{-1}$

(b) $(AB)^{-1} = B^{-1}A^{-1}$ ✓

Question 3 *Compute the determinant of* $A = \begin{bmatrix} 2 & 1 \\ 3 & 5 \end{bmatrix}$.

$\det A = \boxed{7}$

Is A invertible?

Multiple Choice:

(a) *Yes* ✓

(b) *No*

Question 4 *Compute the determinant of* $A = \begin{bmatrix} 2 & 1 \\ 6 & 3 \end{bmatrix}$.

$\det A = \boxed{0}$

Is A invertible?

Multiple Choice:

(a) *Yes*

(b) *No*✓

Question 5 *Compute the determinant of* $A = \begin{bmatrix} 0 & -1 \\ -4 & 5 \end{bmatrix}$.

$\det A = \boxed{-4}$

What is A^{-1}*?*

$$A^{-1} = \frac{1}{\boxed{-4}} \begin{bmatrix} \boxed{5} & \boxed{1} \\ \boxed{4} & \boxed{0} \end{bmatrix}$$
