QUIZ October 4, 2013

1. An invertible matrix must be square.

2. The inverse of
$$\begin{bmatrix} 1 & -3 \\ 2 & -7 \end{bmatrix}$$
is
$$\begin{bmatrix} 7 & -3 \\ 2 & -1 \end{bmatrix}.$$

3. A 2×2 matrix
$$\begin{bmatrix} a & b \\ c & d \end{bmatrix}$$
has determinant $ad - bc$, and this is zero if and only if A has an inverse.

4. The determinants of A and A^T are equal.

5. If A and B are square of the same size and invertible, then,
$$(AB)^{-1} = A^{-1}B^{-1}.$$

1