MATH 220 Section 003
Quiz #1 Version B
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Let A be the matrix

$$\begin{bmatrix} 1 & -7 & 0 & 6 & 5 \\ 0 & 0 & 1 & -2 & -3 \\ -1 & 7 & -4 & 2 & 6 \end{bmatrix}.$$

Use the Row Reduction Algorithm (pages 17–20 of the textbook) to reduce
A to row echelon form (REF) and then to reduced row echelon form (RREF).
Circle the pivot positions in A.

Solution. The RREF of A is

$$\begin{bmatrix} 1 & -7 & 0 & 6 & 0 \\ 0 & 0 & 1 & -2 & 0 \\ 0 & 0 & 0 & 0 & 1 \end{bmatrix}.$$

(This is the only correct answer for the RREF of A. The reason is that, by
Theorem 1 on page 15 of the textbook, the RREF of a matrix is unique.)
The pivot positions in A are the same as the pivot positions in the RREF,
namely: row 1 column 1, row 2 column 3, and row 3 column 5.