

Time limit: 15 minutes.

No calculators or other aids.

You may retake one check at any office hours, once per day.

Reduce the following matrix to Reduced Row Echelon Form.

$$\begin{pmatrix} 0 & 0 & 0 & 0 & -9 \\ 0 & 0 & 3 & -2 & 0 \\ 3 & 3 & -3 & 0 & 9 \end{pmatrix}$$

Answer:

$$\begin{pmatrix} 1 & 1 & 0 & -\frac{2}{3} & 0 \\ 0 & 0 & 1 & -\frac{1}{3} & 0 \\ 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$