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.

$$\begin{pmatrix}
3 & -3 & -4 & 0 & -1 \\
3 & -3 & -2 & 6 & -4 \\
3 & -3 & 2 & 24 & -14
\end{pmatrix}$$

Answer:

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