

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.

$$\begin{pmatrix} 4 & 0 & 6 & 2 & 0 \\ 0 & 12 & -18 & 18 & 6 \\ 8 & -18 & 39 & -23 & -6 \end{pmatrix}$$

Answer:

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