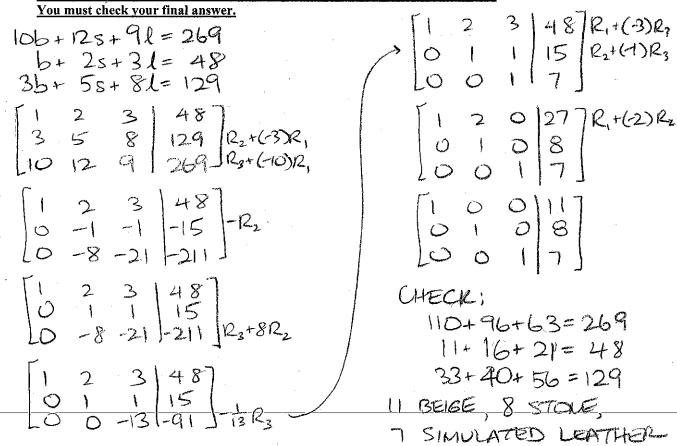
Lee is buying supplies for a design project. Beige tiles sell for \$3 each, and shipping costs are \$1 per tile. Stone tiles sell for \$5 each, and shipping costs are \$2 per tile. Simulated leather tiles sell for \$8 each, and shipping costs are \$3 per tile. Each tile weighs 10 ounces (beige), 12 ounces (stone) and 9 ounces (simulated leather). Lee places an order weighing 269 ounces, which costs \$48 for shipping and \$129 for the tiles. How many of each type of tile does Lee buy?

NOTE: You must state the row operations you used (as demonstrated in class).

As part of your work, you must produce a matrix in reduced row echelon form.



If matrix A has 7 columns, matrix B has 6 rows, matrix C has 9 rows, and A = CB, then

the order of matrix A is 9×7 , the order of matrix B is 6×7 , the order of matrix C is 9×6 ,

$$3x + 5y - 9z = -13$$

Solve the linear system -4x - 5y + 7z = 9

using Gauss-Jordan elimination (pivot method).

SCORE: _____ / 7 PTS

$$-x-2y+4z=6$$

NOTE: You must state the row operations you used (as demonstrated in class).

As part of your work, you must produce a matrix in reduced row echelon form.

You do NOT need to check your final answer.

Find
$$\begin{vmatrix} -2 & 2 & 9 & 4 & 0 \\ 3 & 2 & 0 & -3 & 1 \\ -3 & -1 & -6 & 2 & 0 \\ \hline 0 & 0 & 2 & 0 & 0 \\ \hline -2 & 7 & 5 & 1 & 3 \end{vmatrix}$$
. (HINT: The answer is between -50 and 50 .)

SCORE: _____ / 6 PTS

$$= -\frac{1}{2} \cdot \frac{1}{3} \cdot \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{1}{3} = -\frac{1}{2} \cdot \frac{1}{3} \cdot$$