## Homework - Solving Systems with Matrices

1) The sum of three integers is 189 . The first integer is 28 less than the second. The second integer is 21 less than the sum of the first and third integers. Find the three integers.
2) Pewter Alloys Pewter is an alloy that consists mainly of tin. It also contains small amounts of antimony and copper. Three pewter alloys contain percents of tin, antimony, and copper as show in the matrix below. You have 1296 pounds of tin, 69 pounds of antimony, and 35 pounds of copper. How much of each alloy can you make?

PERCENTS ALLOY BY WEIGHT

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| ---: | :---: | :---: |
| Tin |  |  |
| Antimony |  |  |
| Copper |  |  |\(\left[\begin{array}{ccc}0.90 \& 0.94 \& 0.92 <br>

0.08 \& 0.03 \& 0.06 <br>
0.02 \& 0.03 \& 0.02\end{array}\right]\)

