**Old material:** Generally there would be a more difficult question that is suspiciously similar to the homework.

- 1.1 (New material): Generally here I ask some lighter questions that you should have picked up from class. If you did not understand this part, you should put a question mark.
- 1.1.1 Write the augmented matrix of this system of equations:

$$\left\{
\begin{array}{l}
3x_1 + 4x_2 + 5x_3 + 6x_4 = 7 \\
x_1 + x_2 = x_3 + x_4 \\
x_1 = 8
\end{array}
\right\}$$

- 1.1.2 Which of these are "elementary row operations"?
- (a) Replace one row by the sum of itself and a multiple of another row.
- (b) Interchange two rows.
- (c) Multiply all entries in a row by a nonzero constant.
- (d) Multiply two rows together.
- 1.1.3 If we use elementary row operations, what happens to the solution set?