

### Homework 1

§1.1: 18, 22, 28  
§1.5: 12, 20, 30

§1.2: 16, 20, 24  
§1.7: 16, 30, 32, 34

§1.3: 6, 10, 26  
§1.8: 4, 20, 28

§1.4: 28, 36, 38  
§1.9: 4, 8, 16, 36

### Additional Problems

$$A = \begin{bmatrix} 8 & 11 & -6 & -7 & 13 \\ -7 & -8 & 5 & 6 & -9 \\ 11 & 7 & -7 & -9 & -6 \\ -3 & 4 & 1 & 8 & 7 \end{bmatrix}$$

1. Find the parametric form for the solution set of the homogeneous system whose coefficient matrix is the above matrix  $A$ .
2. Determine whether the column vectors of  $A$  are linearly dependent; and determine whether the row vectors of  $A$  are linearly independent.
3. Find a linear system whose solution set is the span of the column vectors of the above matrix  $A$ .
4. Find a linear system whose solution set is the span of the row vectors of the above matrix  $A$ .