Part I (due Wednesday, January 17 at the beginning of class)

Read Section 1.2. Note: what the textbook calls "basic variables" are often called "leading variables" as well, so we may sometimes refer to them in class that way. Each leading variable corresponds to a leading 1 in a matrix that is in reduced row echelon form.

The Reading Questions and Part II include activities from the section. Do these activities when you come to them in the reading.

Reading Questions

1. Give an example of a 2×5 matrix.
2. Preview Activity 1.2.1 in the section you read.

Part II (prepare for Wednesday, January 17)

1. Activity 1.2.2
2. Activity 1.2.3
3. Activity 1.2.4

Part III: Homework (due Wednesday, January 17 at the beginning of class)

1. Give an example of a system of two linear equations in variables x and y for each of the following three cases:
   (a) where the equations correspond to two non-parallel lines,
   (b) two parallel distinct lines,
   (c) two identical lines (represented with different equations)
2. Describe how the relationship between the coefficients of the variables of the two equations in parts (b) and (c) are different than the relationship between those coefficients in part (a). (Note: please make sure your system examples are different than the examples you've seen in the reading and in class to create even more understanding.)

Running list of vocabulary words that could be a quiz word

- linear equation
- system of linear equations
- linear combination of a set of vectors

- span of a set of vectors
- linearly independent
- linearly dependent