1. (25 points) Let \( L \) over \( \Sigma = \{1, 2, 3, a, b, c, \} \) be the language of names where every name has to begin with a letter (\( a, b, \) or \( c \)).

   (a) Give a recursive definition for \( L \).

   (b) Give a regular set for \( L \).

2. (75 points) Give a regular set for the following languages.

   (a) The set of strings over \( \{1, 2, a, b, c\} \) that start with “\( a \)” and end with “\( 1 \)”. Strings can have a length of one or greater.

   (b) The set of strings over \( \{1, 2, a, b, c\} \) that start and end with a number. Strings can have a length of one or greater.

   (c) The set of strings over \( \{a, b, c\} \) in which all the \( a \)’s precede the \( b \)’s, which in turn precede the \( c \)’s. It is possible that there are no \( a \)’s, or \( b \)’s, or \( c \)’s or the string is empty.