Assignment 6

Due on: 2020-03-11, 12:00 GT

7. For the following grammars, list all the sentences that can be derived from the start symbol.
   a. S → A B | A B C
      A → a | b
      B → c | d
      C → e
   b. S → a B | b B
      A → a | b
      B → c | d
   c. S → a B C | b A C
      A → a | b
      B → c | d
      C → e
   d. S → a B C | b A C
      A → a | b
      B → c | d
      C → e

8. For the following languages, list all the sentences that are not legal.
   a. S → a B | b B
      A → a | b
      B → c | d
   b. S → a B C | b A C
      A → a | b
      B → c | d
      C → e
   c. S → a B C | b A C
      A → a | b
      B → c | d
      C → e
   d. S → a B C | b A C
      A → a | b
      B → c | d
      C → e

9. For the following contexts, list all the sentences that can be derived from the start symbol.
   a. S → a B | b B
      A → a | b
      B → c | d
   b. S → a B C | b A C
      A → a | b
      B → c | d
      C → e
   c. S → a B C | b A C
      A → a | b
      B → c | d
      C → e
   d. S → a B C | b A C
      A → a | b
      B → c | d
      C → e

10. For the following contexts, list all the sentences that are not legal.
    a. S → a B | b B
       A → a | b
       B → c | d
    b. S → a B C | b A C
       A → a | b
       B → c | d
       C → e
    c. S → a B C | b A C
       A → a | b
       B → c | d
       C → e
    d. S → a B C | b A C
       A → a | b
       B → c | d
       C → e