

Activity 3 - Alphabets, Strings and Language Application Practice

5 points each

What to Do

1. Give five (5) strings (w) that can be derived from the given alphabet Σ :

$$\Sigma = \{a, b, c\}$$

YOUR ANSWER:

$w = ?$

$w = ?$

$w = ?$

$w = ?$

$w = ?$

2. Given by two w strings:

$a = \text{automata}$

$b = \text{theory}$

What is aa , ab , ba , and bb (concatenation).

YOUR ANSWER:

$aa = ?$

$ab = ?$

$ba = ?$

$bb = ?$

3. Write the language to atleast 5 members defined with the Language notation:

$$L = \{ab^k \mid k \geq 3\}$$

YOUR ANSWER:

$$L = \{?, ?, ?, ?, ?, \dots\}$$

4. Provide the Language notation for the given language L:

$$L = \{xy, xyy, xyxy, xyxyx, \dots\}$$

YOUR ANSWER:

$$L = \{?|?\}$$

When to Submit It

Before next week class