Task 1

Implementing a Context-Free Grammar (CFG) parser that checks if a given string can be derived from the grammar rules.

Input	Output
6 S AB S BA A aaB B Bb B AB B NULL	Accepted
aab	
	Rejected
6	
SAB	
S BA	
A aaB	
B Bb	
BAB	
B NULL	
aba	

Explanation for Test case 1

$$S \rightarrow AB \rightarrow aaB \rightarrow aab$$

Task 2

Operator Precedence Parsing

Sample input:

3+4-5

2*4-8/2

15*10%7-2

(122+3)/15-5

Sample output:

2

4

1

3.33