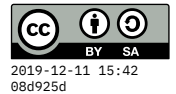


Quiz 4

13 November 2019



Time limit is 20 minutes. You may use a calculator, but no book, notes, or communication.

Questions

1. Below is an expression written in **prefix notation**. Evaluate it and show the final result. **Note:** thanks to the parentheses, a prefix operator can have more than two operands.

- $(* (+ 4 1) (+ (- 5 2) 3))$

2. Below is an expression written in **postfix notation**. Evaluate it and show the final result.

- $3 5 4 + + 2 2 1 + 2 * * -$

(over)

3. This question is about how an operating system schedules tasks to run on the CPU. We'll use **batch** processing, which means that once we start a task, we will run it to completion without interruption. There are two ways to select the next task to run: First-Come, First-Served (FCFS) and Shortest Job First (SJF).

Draw timelines and calculate the **average turnaround time** for scheduling the following jobs using both FCFS and SJF.

Task	Duration (sec)
T1	5
T2	2
T3	6
T4	3