Choose the correct option for the following questions:

1. A process waits for a processor in _____ state.

   a. new
   b. waiting
   c. running
   d. ready

2. A process enters the running state and finds no more input/output requests by the process. The process will go into which state?

   a. New state
   b. Terminate
   c. Running
   d. Waiting

3. When a process is created but not admitted for execution, then the process is in _____ state.

   a. Terminated
   b. Waiting
   c. New
   d. Ready
   e.

4. Suppose a process is waiting for some input/output service. When the service is completed, the process goes to _____ state.

   a. Terminated
   b. Ready
   c. New
   d. Running

5. Which of the following process state transitions is not possible?

   a. ready to running
   b. running to ready
   c. new to waiting
   d. running to terminated