Remembering

1. Define any three of the following terms:
   - Verification
   - Validation
   - Software maintenance
   - Perfective maintenance
   - Corrective maintenance
   - Preventive maintenance
   - Adaptive maintenance

Understanding

2. Which one of the four types of software maintenance best classifies each of the activities below?
   (a) Modifying all API calls in a program to match the new specification from Apple

   (b) Refactoring a working program to better adhere to object-oriented programming patterns

   (c) Fixing the incorrect memory address calculation in the Mars Global Surveyor control computer
Analyzing

3. Facebook uses a tool called “Gatekeeper”, and Google uses what they call “staging servers” and “canary servers”. These tools perform similar tasks to improve reliability. What do these tools do, and how do they improve reliability?

Evaluating

4. Give one reason why tools such as Docker and Vagrant have, by some accounts, “significantly altered” the software verification and validation process.