1. Which of the following utilities can be used to monitor I/O activity? (We encourage you to try all of them, as this is the best way to learn) **1 / 1 point**

- [x] **iotop**

  Correct
  iotop must be run by a root user and directly displays I/O usage on the system, interactively refreshing every few seconds.

- [x] **sar**

  Correct
  sar gives comprehensive system activity reports, including but not limited to I/O activity.

- [x] **vmstat**

  Correct
  vmstat reports a lot of information about not only I/O activity, but memory and other areas.

- [x] **iostat**

  Correct
  iostat gives detailed information about current I/O activity and can report at a specified interval, as many times as desired.

2. Which of the following utilities can be used to monitor process and system load activity? (We encourage you to try all of them as this is the best way to learn) **1 / 1 point**

- [ ] **free**
- [x] **top**

  Correct
  top is a frequently used interactive and constantly updating tool to see what processes running on the system and what resources they are using, sorted by factors that can be chosen.

- [x] **uptime**

  Correct
  uptime shows how long the system has been running.

- [x] **ps**

  Correct
  ps is a frequently used tool that lists some or all processes on the system and shows their state and resource allocation.

- [ ] **df**

3. Your system seems memory-starved and is slowing down. Which utilities would give you information about your memory usage? **1 / 1 point**

- [x] **pmap**

  Correct
  pmap is process map: it shows detailed use of the memory used for a given process.

- [x] **free**

  Correct
  free gives basic statistics about memory used, free, in cache, in swap, etc.

- [x] **vmstat**

  Correct
  vmstat will show current used and free memory, will show activity interactively specifying interval and count, such as **vmstat 2 6**

- [ ] **pstree**
- [ ] **netstat**

4. Which statement is true? **1 / 1 point**

- ○ It is easier to monitor system activity using graphical interface tools, as they vary little from one Linux distribution to the next.
- ◉ It is easier to monitor system activity using command line tools, since they vary little from one Linux distribution to the next.

Correct
The command line tools are generally identical on all Linux-based systems.

5. Which are high level graphical system monitoring tools? **1 / 1 point**

- ☐ Network Manager
- ☑ ksysguard

Correct
ksysguard is associated with the KDE desktop, but can be installed on almost any Linux distribution.

- ☑ gnome-system-monitor

Correct
gnome-system-monitor is associated with the GNOME desktop, but can be installed on almost any Linux distribution.

- ☐ wireshark