

Question: 1

In capacity planning exercises, which tools assist in listing and identifying processes of interest? (Choose TWO correct answers.)

- A. acpid
- B. lsof
- C. pstree
- D. telinit

Answer: B, C

Question: 2

In the following output from top, which processes contribute to the percentage of time that the CPU spends in the state of wa?

Tasks: 193 total, 1 running, 190 sleeping, 2 stopped, 0 zombie

Cpu(s): 0.5%us, 0.3%sy, 0.0%ni, 98.2%id, 1.0%wa, 0.0%hi, 0.0%si, 0.0%st

- A. Processes waiting for user interaction.
- B. Processes that were already closed and are waiting to be launched again.
- C. Processes that have not been scheduled yet because they haven't been fully loaded into RAM or are in swap.
- D. Processes waiting for IO operations to complete.

Answer: D

Question: 3

In the below example output, which columns detail the percent of time the CPU spent running non-kernel code and the percent of time the CPU spent running kernel code? (Choose TWO correct answers.)

vmstat 1 100

```
procs -----memory----- --swap-- ----io---- --system-- ----cpu----
r b swpd free buff cache si so bi bo in cs us sy id wa
0 0 0 282120 134108 5797012 0 0 0 0 2 0 0 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1007 359 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1117 577 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1007 366 0 0 100 0
```

- A. id
- B. us
- C. wa

D. sy

Answer: B, D

Question: 4

In the following output, what percentage of time was the CPU waiting for pending I/O?

```
# vmstat 1 100
```

```
procs -----memory----- ---swap-- -----io---- --system-- ----cpu----
r b swpd free buff cache si so bi bo in cs us sy id wa
0 0 0 282120 134108 5797012 0 0 0 0 2 0 0 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1007 359 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1117 577 0 0 100 0
0 0 0 282120 134108 5797012 0 0 0 0 1007 366 0 0 100 0
```

- A. 0
- B. 100
- C. 35.9
- D. 57.7
- E. 36.6

Answer: A

Question: 5

Which commands below are useful to collect data about remote filesystem connections? (Choose TWO correct answers.)

- A. pidstat
- B. nfsiostat
- C. sadf
- D. cifsioat

Answer: B, D

Question: 6

In the following output, the load averages represent the system load averages for what time frames?

```
12:10:05 up 18 days, 19:00, 2 users, load average: 0.47, 24.71, 35.31
```

- A. 1, 5 and 15 minutes
- B. 1, 15 and 30 minutes

- C. 1, 15, and 30 seconds
- D. 15, 30 and 60 minutes
- E. 15, 30 and 60 seconds

Answer: A

Question: 7

When planning a web server which of the following choices will impact system sizing? (Choose THREE correct answers.)

- A. How many concurrent users are expected.
- B. Which hardware vendor has better Linux support.
- C. What type of content will be served.
- D. What scripting languages will the web server support.
- E. Will the OS install be CD, DVD or network based.

Answer: A, C, D

Question: 8

What mechanism does collectd use to gather monitoring information on systems?

- A. It uses a library of plugins.
- B. A master server connects to a collectd service on each machine to retrieve the information.
- C. It collects its own information on each server and sends that to a master server.
- D. It makes SNMP queries to the clients being monitored.

Answer: A

Question: 9

Which of the following tools are used to measure memory usage? (Choose THREE correct answers.)

- A. mpstat
- B. pstree
- C. sar
- D. top
- E. vmstat

Answer: C, D, E

Question: 10

Which of the following is a side effect of extensive usage of swap space?

- A. The root filesystem may become full because swap space is always located on the system root partition.
- B. The overall system performance may degrade because of heavy hard disk use and memory reorganization.
- C. Since processes always exist completely in either RAM or swap, regular RAM may become unused if the kernel does not move processes back from the swap space to memory.
- D. The memory may become fragmented and slow down the access to memory pages. However, this can be kept to a minimum by the regular use of memfrag -d.
- E. Applications need to restart because their virtual memory addresses change to reflect memory relocation to the swap address area.

Answer: B

Question: 11

In this example output, which descriptions match the purpose of the free, buff and cache columns? (Choose THREE correct answers.)

```
# vmstat 1 100
```

```
procs -----memory----- ---swap-- ----io---- --system-- ----cpu----
r b swpd free buff cache si so bi bo in cs us sy id wa
0 0  0 282120 134108 5797012 0 0 0 0 2 0 0 0 0 100 0
0 0  0 282120 134108 5797012 0 0 0 0 1007 359 0 0 100 0
0 0  0 282120 134108 5797012 0 0 0 0 1117 577 0 0 100 0
0 0  0 282120 134108 5797012 0 0 0 0 1007 366 0 0 100 0
```

- A. Used swap space
- B. RAM available for filesystem buffers
- C. Available free RAM
- D. RAM used for buffers
- E. RAM used for filesystem cache

Answer: C, D, E

Question: 12

In the following output, what is the 5 minute load average for the system?

```
# uptime
```

12:10:05 up 18 days, 19:00, 2 users, load average: 0.47, 24.71, 35.31

- A. 0.47
- B. 24.71
- C. 35.31
- D. There is no 5 minute interval. It is some value between 0.47 and 24.71.
- E. There is no 5 minute interval. It is some value between 24.71 and 35.31.

Answer: B

Question: 13

Which of the following commands will provide the PIDs of the processes sorted by which are using the most CPU cycles on the Linux system?

- A. top
- B. uptime
- C. ps aux
- D. vmstat
- E. freemem

Answer: A

Question: 14

Which command will report information on memory usage, paging and block input/output?

- A. free
- B. memshow
- C. ps
- D. top
- E. vmstat

Answer: E

Question: 15

When is historical data of resource usage important? (Select THREE correct answers.)

- A. Predicting when resources will need to be increased.
- B. Selecting a computer vendor.
- C. Identifying processes killed during out of memory occurrences.

-
- D. Diagnosing capacity problems.
 - E. Troubleshooting a software problem.

Answer: A, D, E