



Actual exam question from CompTIA's XK0-005

Question #: 1

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator accidentally deleted the `/boot/vmlinuz` file and must resolve the issue before the server is rebooted. Which of the following commands should the administrator use to identify the correct version of this file?

- A. `rpm -qa | grep kernel; uname -a`
- B. `yum -y update; shutdown -r now`
- C. `cat /etc/centos-release; rpm -Uvh --nodeps`
- D. `telinit 1; restorecon -Rv /boot`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 2

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer needs to change the secure remote login port from 22 to 49000. Which of the following files should the engineer modify to change the port number to the desired value?

- A. /etc/host.conf
- B. /etc/hostname
- C. /etc/services
- D. /etc/ssh/sshd_config

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 3

Topic #: 1

[\[All XK0-005 Questions\]](#)

A new file was added to a main Git repository. An administrator wants to synchronize a local copy with the contents of the main repository. Which of the following commands should the administrator use for this task?

- A. git reflog
- B. git pull
- C. git status
- D. git push

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 4

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to redirect all HTTP traffic temporarily to the new proxy server 192.0.2.25 on port 3128. Which of the following commands will accomplish this task?

- A. `iptables -t nat -D PREROUTING -p tcp --sport 80 -j DNAT --to-destination 192.0.2.25:3128`
- B. `iptables -t nat -A PREROUTING -p top --dport 81 -j DNAT --to-destination 192.0.2.25:3129`
- C. `iptables -t nat -I PREROUTING -p top --sport 80 -j DNAT --to-destination 192.0.2.25:3129`
- D. `iptables -t nat -A PREROUTING -p tcp --dport 80 -j DNAT --to-destination 192.0.2.25:3128`

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Actual exam question from CompTIA's XK0-005

Question #: 5

Topic #: 1

[\[All XK0-005 Questions\]](#)

Developers have requested implementation of a persistent, static route on the application server. Packets sent over the interface eth0 to 10.0.213.5/32 should be routed via 10.0.5.1. Which of the following commands should the administrator run to achieve this goal?

- A. `route -i eth0 -p add 10.0.213.5 10.0.5.1`
- B. `route modify eth0 +ipv4.routes "10.0.213.5/32 10.0.5.1"`
- C. `echo "10.0.213.5 10.0.5.1 eth0" > /proc/net/route`
- D. `ip route add 10.0.213.5/32 via 10.0.5.1 dev eth0`

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Actual exam question from CompTIA's XK0-005

Question #: 6

Topic #: 1

[\[All XK0-005 Questions\]](#)

A user is asking the systems administrator for assistance with writing a script to verify whether a file exists. Given the following:

```
#1/bin/bash
filename=$1
<CONDITIONAL>
echo "File exists"
else
echo "File does not exist"
fi
```

Which of the following commands should replace the <CONDITIONAL> string?

- A. if [-f "\$filename"]; then
- B. if [-d "\$filename"]; then
- C. if [-f "\$filename"] then
- D. if [-f "\$filename"]; while

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Actual exam question from CompTIA's XK0-005

Question #: 7

Topic #: 1

[\[All XK0-005 Questions\]](#)

DRAG DROP -

As a Systems Administrator, to reduce disk space, you were tasked to create a shell script that does the following:
Add relevant content to /tmp/script.sh, so that it finds and compresses related files in /var/log without recursion.

INSTRUCTIONS:

Drag and drop snippets to fill the blanks to build a script that performs the actual compression of rotated log files.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

Snippets

done

while

xz

pgrep

locate

for

sed

filename

until

tar

then

\$log

egrep

"\$log.[1-6]\$"

"log.[1-6]\$"

"\$1"

repeat

in

/tmp/tempfile

/var/log

zip

gzip

rar

awk

"\$6"

```
#!/bin/bash
```

```
#name: script.sh
```

```
find /var/log -type f -maxdepth 1 | grep [?] > /tmp/tempfile
```

```
[?] filename [?] $(cat [?])
```

```
do
```

```
[?] $filename
```

```
[?]
```

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Actual exam question from CompTIA's XK0-005

Question #: 8

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is deploying three identical, cloud-based servers. The administrator is using the following code to complete the task:

```
resource "aws_instance" "ec2_instance" {  
  
    ami                = data.aws_ami.vendor-Linux-2.id  
    associate_public_ip_address = true  
    count              = 3  
    instance_type      = "instance_type"  
    vpc_security_group_ids = [aws_security_group.allow_ssh.id]  
    key_name           = aws_key_pair.key_pair.key_name  
  
    tags = {  
        Name = "${var.namespace} ${count.index}"  
    }  
  
}
```

Which of the following technologies is the administrator using?

- A. Ansible
- B. Puppet
- C. Chef
- D. Terraform

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Actual exam question from CompTIA's XK0-005

Question #: 9

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following technologies can be used as a central repository of Linux users and groups?

- A. LDAP
- B. MFA
- C. SSO
- D. PAM

[Show Suggested Answer](#)



Actual exam question from CompTIA's XK0-005

Question #: 10

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is troubleshooting connectivity issues and trying to find out why a Linux server is not able to reach other servers on the same subnet it is connected to. When listing link parameters, the following is presented:

```
# ip link list dev eth0
2: etho: <NO-CARRIER, BROADCAST, MULTICAST, UP> mtu 1500, qdisc
fq_codel state DOWN mode DEFAULT group default qlen 1000
link/ether ac:00:11:22:33:cd brd ff:ff:ff:ff:ff:ff
```

Based on the output above, which of following is the MOST probable cause of the issue?

- A. The address ac:00:11:22:33:cd is not a valid Ethernet address.
- B. The Ethernet broadcast address should be ac:00:11:22:33:ff instead.
- C. The network interface eth0 is using an old kernel module.
- D. The network interface cable is not connected to a switch.

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Actual exam question from CompTIA's XK0-005

Question #: 11

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator was asked to run a container with the httpd server inside. This container should be exposed at port 443 of a Linux host machine while it internally listens on port 8443. Which of the following commands will accomplish this task?

- A. `podman run -d -p 443:8443 httpd`
- B. `podman run -d -p 8443:443 httpd`
- C. `podman run -d -e 443:8443 httpd`
- D. `podman exec -p 8443:443 httpd`

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Actual exam question from CompTIA's XK0-005

Question #: 12

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to analyze a failing application that is running inside a container. Which of the following commands allows the Linux administrator to enter the running container and analyze the logs that are stored inside?

- A. `docker run -ti app /bin/sh`
- B. `podman exec -ti app /bin/sh`
- C. `podman run -d app /bin/bash`
- D. `docker exec -d app /bin/bash`

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Actual exam question from CompTIA's XK0-005

Question #: 13

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator needs to clone the partition `/dev/sdc1` to `/dev/sdd1`. Which of the following commands will accomplish this task?

- A. `tar -cvzf /dev/sdd1 /dev/sdc1`
- B. `rsync /dev/sdc1 /dev/sdd1`
- C. `dd if=/dev/sdc1 of=/dev/sdd1`
- D. `scp /dev/sdc1 /dev/sdd1`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 14

Topic #: 1

[\[All XK0-005 Questions\]](#)

When trying to log in remotely to a server, a user receives the following message:

Password:

```
Last failed login: Wed Sep 15 17:23:45 CEST 2021 from 10.0.4.3 on ssh:notty
There were 3 failed login attempts since the last successful login.
Connection to localhost closed.
```

The server administrator is investigating the issue on the server and receives the following outputs:

Output 1:

```
user:x:1001:7374:~/home/user:/bin/false
```

Output 2:

```
dzwx-----. 2 user 62 Sep 15 17:17 /home/user
```

Output 3:

```
Sep 12 14:14:05 server sshd[22958] Failed password for user from 10.0.2.8
Sep 15 17:24:03 server sshd[8460]: Accepted keyboard-interactive/pam for user from 10.0.6.5 port 50928 ssh2
Sep 15 17:24:03 server sshd[8460]: pam_unix(sshd:session): session opened for user testuser
Sep 15 17:24:03 server sshd[8460]: pam_unix(sshd:session): session closed for user testuser
```

Which of the following is causing the issue?

- A. The wrong permissions are on the user's home directory.
- B. The account was locked out due to three failed logins.
- C. The user entered the wrong password.
- D. The user has the wrong shell assigned to the account.

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Actual exam question from CompTIA's XK0-005

Question #: 15

Topic #: 1

[\[All XK0-005 Questions\]](#)

A new Linux systems administrator just generated a pair of SSH keys that should allow connection to the servers. Which of the following commands can be used to copy a key file to remote servers? (Choose two.)

- A. wget
- B. ssh-keygen
- C. ssh-keyscan
- D. ssh-copy-id
- E. ftpd
- F. scp

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 16

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator needs to reconfigure a Linux server to allow persistent IPv4 packet forwarding. Which of the following commands is the correct way to accomplish this task?

- A. `echo 1 > /proc/sys/net/ipv4/ipv4_forward`
- B. `sysctl -w net.ipv4.ip_forward=1`
- C. `firewall-cmd --enable ipv4_forwarding`
- D. `systemctl start ipv4_forwarding`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 17

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator would like to use systemd to schedule a job to run every two hours. The administrator creates timer and service definitions and restarts the server to load these new configurations. After the restart, the administrator checks the log file and notices that the job is only running daily. Which of the following is MOST likely causing the issue?

- A. The checkdiskspace.service is not running.
- B. The checkdiskspace.service needs to be enabled.
- C. The OnCalendar schedule is incorrect in the timer definition.
- D. The system-daemon services need to be reloaded.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 18

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator deployed a Linux server that is running a web application on port 6379/tcp.

SELinux is in enforcing mode based on organization policies.

The port is open on the firewall.

Users who are trying to connect to a local instance of the web application receive Error 13, Permission denied.

The administrator ran some commands that resulted in the following output:

```
# semanage port -l | egrep ' (^http_port_t|6379) '  
http_port_t tcp 80, 81, 443, 488, 8008, 8009, 8443, 9000
```

```
# curl http://localhost/App.php  
Cannot connect to App Server.
```

Which of the following commands should be used to resolve the issue?

- A. `semanage port -d -t http_port_t -p tcp 6379`
- B. `semanage port -a -t http_port_t -p tcp 6379`
- C. `semanage port -a http_port_t -p top 6379`
- D. `semanage port -l -t http_port_tcp 6379`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 19

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator created a web server for the company and is required to add a tag for the API so end users can connect. Which of the following would the administrator do to complete this requirement?

- A. `hostnamectl status --no-ask-password`
- B. `hostnamectl set-hostname "$(perl -le "print" "A" x 86)"`
- C. `hostnamectl set-hostname Comptia-WebNode -H root@192.168.2.14`
- D. `hostnamectl set-hostname Comptia-WebNode --transient`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 20

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator wants to back up the directory `/data` and all its contents to `/backup/data` on a remote server named `remote`. Which of the following commands will achieve the desired effect?

- A. `scp -p /data remote:/backup/data`
- B. `ssh -i /remote:/backup/ /data`
- C. `rsync -a /data remote:/backup/`
- D. `cp -r /data /remote/backup/`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 21

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator needs to make some changes in the IaC declaration templates. Which of the following commands would maintain version control?

- A. `git clone https://github.com/comptia/linux+-.git`
`git push origin`
- B. `git clone https://qithub.com/comptia/linux+-.git`
`git fetch New-Branch`
- C. `git clone https://github.com/comptia/linux+-.git`
`git status`
- D. `git clone https://github.com/comptia/linux+-.git`
`git checkout -b <new-branch>`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 22

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator attempts to rename a file on a server but receives the following error.

```
mv: cannot move 'files/readme.txt' to 'files/readme.txt.orig': Operation not permitted.
```

The administrator then runs a few commands and obtains the following output:

```
$ ls -ld files/
drwxrwxrwt.1 users users 20 Sep 10 15:15 files/
$ ls -a files/
drwxrwxrwt.1 users users 20 Sep 10 15:15 -
drwxr-xr-x.1 users users 32 Sep 10 15:15 ..
-rw-rw-r--.1 users users 4 Sep 12 10:34 readme.txt
```

Which of the following commands should the administrator run NEXT to allow the file to be renamed by any user?

- A. `chgrp reet files`
- B. `chacl -R 644 files`
- C. `chown users files`
- D. `chmod -t files`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 23

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following commands will display the operating system?

- A. `uname -n`
- B. `uname -s`
- C. `uname -o`
- D. `uname -m`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 24

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems engineer is adding a new 1GB XFS filesystem that should be temporarily mounted under `/ops/app`. Which of the following is the correct list of commands to achieve this goal?

- A. `pvcreate -L1G /dev/app`
`mkfs.xfs /dev/app`
`mount /dev/app /opt/app`
- B. `parted /dev/sdb --script mkpart primary xfs 1GB`
`mkfs.xfs /dev/sdb`
`mount /dev/sdb /opt/app`
- C. `lvs --create 1G --name app`
`mkfs.xfs /dev/app`
`mount /dev/app /opt/app`
- D. `lvcreate -L 1G -n app app_vg`
`mkfs.xfs /dev/app_vg/app`
`mount /dev/app_vg/app /opt/app`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 25

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator recently downloaded a software package that is currently in a compressed file. Which of the following commands will extract the files?

- A. `unzip -v`
- B. `bzip2 -z`
- C. `gzip`
- D. `funzip`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 26

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is troubleshooting SSH connection issues from one of the workstations.

When users attempt to log in from the workstation to a server with the IP address 104.21.75.76, they receive the following message:

```
ssh: connect to host 104.21.75.76 port 22: Connection refused
```

The administrator reviews the information below:

Workstation output 1:

```
eth0: <BROADCAST,MULTICAST, UP, LOWER_UP> mtu 1500 qdisc mq state UP group default
link/ether 00:15:5d:e9:e9:fb brd 5.189.153.255 scope global eth0
inet 5.189.153.89/24 brd 5.189.153.255 scope global eth0
```

Workstation output 2:

```
default via 5.189.153.1 dev eth0
5.189.153.0/24 dev eth0 proto kernel scope link src 5.189.153.89
```

Server output 1:

target	prot	opt	source	destination	
REJECT	tcp	--	101.68.78.194	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable
REJECT	tcp	--	222.186.180.130	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable
REJECT	tcp	--	104.131.1.39	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable
REJECT	tcp	--	68.183.196.11	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable
REJECT	tcp	--	5.189.153.89	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable
REJECT	tcp	--	41.93.32.148	0.0.0.0/0	tcp dpt:22 ctstate NEW, UNTRACKED reject-with icmp-port-unreachable

Server output 2:

```
sshd.service - OpenSSH server daemon
Loaded: loaded (/usr/lib/systemd/system/sshd.service: disabled; vendor preset: enabled)
Active: active (running) since Thu 2021-08-26 18:50:19 CEST; 2 weeks 5 days ago
```

Server output 3:

```
eth0: <BROADCAST, MULTICAST, UP, LOWER_UP> mtu 1500 qdisc mg state UP group default
link/ether 52:52:00:2a:bb:98 brd 104.21.75.255 scope global eth0
inet 104.21.75.76/24 brd 104.21.75.255 scope global eth0
```

Server output 4:

```
default via 104.21.75.254 dev eth0
104.21.75.0/24 dev eth0 proto kernel scope link src 104.21.75.76
```

Which of the following is causing the connectivity issue?

- A. The workstation has the wrong IP settings.
- B. The sshd service is disabled.
- C. The server's firewall is preventing connections from being made.
- D. The server has an incorrect default gateway configuration.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 27

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following files holds the system configuration for journal when running systemd?

- A. /etc/systemd/journald.conf
- B. /etc/systemd/systemd-journalctl.conf
- C. /usr/lib/systemd/journalctl.conf
- D. /etc/systemd/systemd-journald.conf

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 28

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is tasked with creating resources using containerization. When deciding how to create this type of deployment, the administrator identifies some key features, including portability, high availability, and scalability in production. Which of the following should the Linux administrator choose for the new design?

- A. Docker
- B. On-premises systems
- C. Cloud-based systems
- D. Kubernetes

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 29

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following tools is commonly used for creating CI/CD pipelines?

- A. Chef
- B. Puppet
- C. Jenkins
- D. Ansible

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 30

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator requires that all files that are created by the user named web have read-only permissions by the owner. Which of the following commands will satisfy this requirement?

- A. `chown web:web /home/web`
- B. `chmod -R 400 /home/web`
- C. `echo "umask 377" >> /home/web/.bashrc`
- D. `setfacl read /home/web`

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 31

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is tasked with preventing logins from accounts other than root, while the file `/etc/nologin` exists. Which of the following PAM modules will accomplish this task?

- A. `pam_login.so`
- B. `pam_access.so`
- C. `pam_logindf.so`
- D. `pam_nologin.so`

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 32

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator has been tasked with disabling the nginx service from the environment to prevent it from being automatically and manually started. Which of the following commands will accomplish this task?

- A. `systemctl cancel nginx`
- B. `systemctl disable nginx`
- C. `systemctl mask nginx`
- D. `systemctl stop nginx`

[Show Suggested Answer](#)



Actual exam question from CompTIA's XK0-005

Question #: 33

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is troubleshooting an issue in which an application service failed to start on a Linux server. The administrator runs a few commands and gets the following outputs:

Output 1:

```
Dec 23 23:14:15 root systemd[1] logsearch.service: Failed to start Logsearch.
```

Output 2:

```
logsearch.service - Log Search
Loaded: loaded (/etc/systemd/system/logsearch.service; enabled; vendor preset:enabled)
Active: failed (Result: timeout)
Process: 3267 ExecStart=/usr/share/logsearch/bin/logger ...
Main PID: 3267 (code=killed, signal=KILL)
```

Based on the above outputs, which of the following is the MOST likely action the administrator should take to resolve this issue?

- A. Enable the logsearch.service and restart the service.
- B. Increase the TimeoutStartUsec configuration for the logsearch.service.
- C. Update the OnCalendar configuration to schedule the start of the logsearch.service.
- D. Update the KillSignal configuration for the logsearch.service to use TERM.

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 34

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator has installed a web server, a database server, and a web application on a server. The web application should be active in order to render the web pages. After the administrator restarts the server, the website displays the following message in the browser: Error establishing a database connection. The Linux administrator reviews the following relevant output from the systemd init files:

```
[Unit]
Description=The Apache #HTTP Server
Wants=httpd-init.service
After=network.target remote-fs.target nss-lookup-target httpd-init.service mariadb.service

[Unit]
Description=MariaDB 10.5 database server
After=network.target
```

The administrator needs to ensure that the database is available before the web application is started. Which of the following should the administrator add to the HTTP server .service file to accomplish this task?

- A. TRIGGERS=mariadb.service
- B. ONFAILURE=mariadb.service
- C. WANTEDBY=mariadb.service
- D. REQUIRES=mariadb.service

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 35

Topic #: 1

[\[All XK0-005 Questions\]](#)

Several users reported that they were unable to write data to the /oracle1 directory. The following output has been provided:

Filesystem	Size	Used	Available	Use%	Mounted on
/dev/sdb1	100G	50G	50G	50%	/oracle1

Which of the following commands should the administrator use to diagnose the issue?

- A. `df -i /oracle1`
- B. `fdisk -l /dev/sdb1`
- C. `lsblk /dev/sdb1`
- D. `du -sh /oracle1`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 36

Topic #: 1

[\[All XK0-005 Questions\]](#)

After installing some RPM packages, a systems administrator discovers the last package that was installed was not needed. Which of the following commands can be used to remove the package?

- A. `dnf remove packagename`
- B. `apt-get remove packagename`
- C. `rpm -i packagename`
- D. `apt remove packagename`

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 37

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is checking the system logs. The administrator wants to look at the last 20 lines of a log. Which of the following will execute the command?

- A. tail -v 20
- B. tail -n 20
- C. tail -c 20
- D. tail -l 20

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Actual exam question from CompTIA's XK0-005

Question #: 38

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator is trying to diagnose a performance issue and is reviewing the following output:

```
avg-cpu:  %user  %nice  %system  %iowait  %steal  %idle
           2.00   0.00   3.00    32.00   0.00   63.00
```

```
Device          tps  kB_read/s  kB_wrtn/s  kB_read  kB_wrtn
sdb              345.00      0.02      0.04 4739073123 23849523
sdb1            345.00 32102.03 12203.01 4739073123 23849523
```

System Properties:

CPU: 4 vCPU -

Memory: 40GB -

Disk maximum IOPS: 690 -

Disk maximum throughput: 44Mbps | 44000Kbps

Based on the above output, which of the following BEST describes the root cause?

- A. The system has reached its maximum IOPS, causing the system to be slow.
- B. The system has reached its maximum permitted throughput, therefore iowait is increasing.
- C. The system is mostly idle, therefore the iowait is high.
- D. The system has a partitioned disk, which causes the IOPS to be doubled.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 39

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator wants to test the route between IP address 10.0.2.15 and IP address 192.168.1.40. Which of the following commands will accomplish this task?

- A. route -e get to 192.168.1.40 from 10.0.2.15
- B. ip route get 192.163.1.40 from 10.0.2.15
- C. ip route 192.169.1.40 to 10.0.2.15
- D. route -n 192.168.1.40 from 10.0.2.15

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 40

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator was tasked with deleting all files and directories with names that are contained in the `sobelete.txt` file. Which of the following commands will accomplish this task?

- A. `xargs -f cat toDelete.txt -rm`
- B. `rm -d -r -f toDelete.txt`
- C. `cat toDelete.txt | rm -frd`
- D. `cat toDelete.txt | xargs rm -rf`

[Show Suggested Answer](#)



Actual exam question from CompTIA's XK0-005

Question #: 41

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is troubleshooting the root cause of a high CPU load and average.

```
$ uptime
07:30:43 up 20 days, 3 min, 1 user, load average: 2.98, 3.62, 5.21
```

```
$ top
PID  USER PR  NI  VIRT  RES  SHR  S  %CPU  %MEM  TIME+  COMMAND
6295 user1 30  -10 5465 56465 8254 R 86.5 1.5 7:35.25 app1
```

```
$ ps -ef | grep user1
user1 6295 1 7:42:19 tty/1 06:48:29 /usr/local/bin/app1
```

Which of the following commands will permanently resolve the issue?

- A. `renice -n -20 6295`
- B. `pstree -p 6295`
- C. `iostat -cy 1 5`
- D. `kill -9 6295`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 42

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator wants to set the SUID of a file named dev_team.txt with 744 access rights. Which of the following commands will achieve this goal?

- A. `chmod 4744 dev_team.txt`
- B. `chmod 744 --setuid dev_team.txt`
- C. `chmod -c 744 dev_team.txt`
- D. `chmod -v 4744 --suid dev_team.txt`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 43

Topic #: 1

[\[All XK0-005 Questions\]](#)

A developer has been unable to remove a particular data folder that a team no longer uses. The developer escalated the issue to the systems administrator. The following output was received:

```
# rmdir data/  
rmdir: failed to remove `data/': Operation not permitted  
# rm -rf data/  
rm: cannot remove `data': Operation not permitted  
# mv data/ mydata  
mv: cannot move `data/' to `mydata': Operation not permitted  
# cd data/  
# cat > test.txt  
bash: test.txt: Permission denied
```

Which of the following commands can be used to resolve this issue?

- A. `chgrp -R 755 data/`
- B. `chmod -R 777 data/`
- C. `chattr -R -i data/`
- D. `chown -R data/`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 44

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to ensure that Java 7 and Java 8 are both locally available for developers to use when deploying containers. Currently only Java 8 is available. Which of the following commands should the administrator run to ensure both versions are available?

- A. docker image load java:7
- B. docker image pull java:7
- C. docker image import java:7
- D. docker image build java:7

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 45

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer is installing packages during VM provisioning. Which of the following should the engineer use to accomplish this task?

- A. Cloud-init
- B. Bash
- C. Docker
- D. Sidecar

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 46

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is tasked with creating a cloud-based server with a public IP address.

The code is as follows:

```
---
-name: start an instance with a public IP address
community.abc.ec2_instance:
  name: "public-compute-instance"
  key_name: "comptia-ssh-key"
  vpc_subnet_id: subnet-5cjs1
  instance_type: instance.type
  security_group: comptia
  network:
    assign_public_ip: true
  image_id: ami-1234568
  tags:
    Environment: Comptia-Items-Writing-Workshop
...
```

Which of the following technologies did the systems administrator use to complete this task?

- A. Puppet
- B. Git
- C. Ansible
- D. Terraform

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 47

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux systems administrator is setting up a new web server and getting 404 - NOT FOUND errors while trying to access the web server pages from the browser. While working on the diagnosis of this issue, the Linux systems administrator executes the following commands:

```
# getenforce
Enforcing

# matchpathcon -V /var/www/html/*
/var/www/html/index.html has context unconfined_u:object_r:user_home_t:s0, should be system_u:object_r:httpd_sys_content_t:s0
/var/www/html/page1.html has context unconfined_u:object_r:user_home_t:s0, should be system_u:object_r:httpd_sys_content_t:s0
```

Which of the following commands will BEST resolve this issue?

- A. `sed -i 's/SELINUX=enforcing/SELINUX=disabled/' /etc/selinux/config`
- B. `restorecon -R -v /var/www/html`
- C. `setenforce 0`
- D. `setsebool -P httpd_can_network_connect_db on`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 48

Topic #: 1

[\[All XK0-005 Questions\]](#)

To harden one of the servers, an administrator needs to remove the possibility of remote administrative login via the SSH service. Which of the following should the administrator do?

- A. Add the line DenyUsers root to the /etc/hosts.deny file.
- B. Set PermitRootLogin to no in the /etc/ssh/sshd_config file.
- C. Add the line account required pam_nologin. so to the /etc/pam.d/sshd file.
- D. Set PubKeyAuthentication to no in the /etc/ssh/ssh_config file.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 49

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following is a function of a bootloader?

- A. It initializes all the devices that are required to load the OS.
- B. It mounts the root filesystem that is required to load the OS.
- C. It helps to load the different kernels to initiate the OS startup process.
- D. It triggers the start of all the system services.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 50

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator configured firewall rules using firewalld. However, after the system is rebooted, the firewall rules are not present:

```
Chain INPUT (policy ACCEPT)
target      prot opt source                destination
Chain FORWARD (policy ACCEPT)
target      prot opt source                destination
Chain OUTPUT (policy ACCEPT)
target      prot opt source                destination
```

The systems administrator makes additional checks:

```
- dynamic firewall daemon
  Loaded: loaded (/usr/lib/systemd/system/firewalld.service: disabled; vendor preset: enabled)
  Active: inactive (dead)
  Docs: man: firewalld (1)

firewalld is not running
```

Which of the following is the reason the firewall rules are not active?

- A. iptables is conflicting with firewalld.
- B. The wrong system target is activated.
- C. FIREWALL_ARGS has no value assigned.
- D. The firewalld service is not enabled.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 51

Topic #: 1

[\[All XK0-005 Questions\]](#)

A newly created container has been unable to start properly, and a Linux administrator is analyzing the cause of the failure. Which of the following will allow the administrator to determine the FIRST command that is executed inside the container right after it starts?

- A. `docker export <container_id>`
- B. `docker info <container_id>`
- C. `docker start <container_id>`
- D. `docker inspect <container_id>`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 52

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is scheduling a system job that runs a script to check available disk space every hour. The Linux administrator does not want users to be able to start the job. Given the following:

```
[Unit]
Description=Check available disk space
RefuseManualstart=yes
RefuseManualStop=yes

[Timer]
Persistent=true
OnCalendar=*-*-*-*:00:00
Unit=checkdiskspace.service

[Install]
WantedBy=timers.target
```

The Linux administrator attempts to start the timer service but receives the following error message:

```
Failed to start checkdiskspace.timer: Operation refused ...
```

Which of the following is MOST likely the reason the timer will not start?

- A. The checkdiskspace.timer unit should be enabled via systemctl.
- B. The timers.target should be reloaded to get the new configuration.
- C. The checkdiskspace.timer should be configured to allow manual starts.
- D. The checkdiskspace.timer should be started using the sudo command.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 53

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator wants to find out whether files from the wget package have been altered since they were installed. Which of the following commands will provide the correct information?

- A. rpm -i wget
- B. rpm -qf wget
- C. rpm -F wget
- D. rpm -V wget

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 54

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux engineer set up two local DNS servers (10.10.10.10 and 10.10.10.20) and was testing email connectivity to the local mail server using the mail command on a local machine when the following error appeared:

```
Send-mail: Cannot open mail:25
```

The local machine DNS settings are:

```
$ cat /etc/resolv.conf
nameserver 10.10.10.10 #web records
nameserver 10.10.10.20 #email records
```

```
Mail server: mail.example.com
```

Which of the following commands could the engineer use to query the DNS server to get mail server information?

- A. `dig @example.com 10.10.10.20 a`
- B. `dig @10.10.10.20 example.com mx`
- C. `dig @example.com 10.10.10.20 ptr`
- D. `dig @10.10.10.20 example.com ns`

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 55

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux engineer has been notified about the possible deletion of logs from the file `/opt/app/logs`. The engineer needs to ensure the log file can only be written into without removing previous entries.

```
# lsattr /opt/app/logs
-----e--- logs
```

Which of the following commands would be BEST to use to accomplish this task?

- A. `chattr +a /opt/app/logs`
- B. `chattr +d /opt/app/logs`
- C. `chattr +i /opt/app/logs`
- D. `chattr +c /opt/app/logs`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 56

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator needs to check if the service `systemd-resolved.service` is running without any errors. Which of the following commands will show this information?

- A. `systemctl status systemd-resolved.service`
- B. `systemctl enable systemd-resolved.service`
- C. `systemctl mask systemd-resolved.service`
- D. `systemctl show systemd-resolved.service`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 57

Topic #: 1

[\[All XK0-005 Questions\]](#)

SIMULATION -

Junior system administrator had trouble installing and running an Apache web server on a Linux server. You have been tasked with installing the Apache web server on the Linux server and resolving the issue that prevented the junior administrator from running Apache.

INSTRUCTIONS -

Install Apache and start the service. Verify that the Apache service is running with the defaults.

Typing "help" in the terminal will show a list of relevant event commands.

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

CentOS Command Prompt

```
[root@centos7]#
```

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 58

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to remove software from the server. Which of the following RPM options should be used?

- A. rpm -s
- B. rpm -d
- C. rpm -q
- D. rpm -e

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 59

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux system fails to start and delivers the following error message:

```
Checking all file systems.  
/dev/sda1 contains a file system with errors, check forced.  
/dev/sda1: Inodes that were part of a corrupted orphan linked list found.  
/dev/sda1: UNEXPECTED INCONSISTENCY;
```

Which of the following commands can be used to address this issue?

- A. `fsck.ext4 /dev/sda1`
- B. `partprobe /dev/sda1`
- C. `fdisk /dev/sda1`
- D. `mkfs.ext4 /dev/sda1`

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 60

Topic #: 1

[\[All XK0-005 Questions\]](#)

Based on an organization's new cybersecurity policies, an administrator has been instructed to ensure that, by default, all new users and groups that are created fall within the specified values below.

```
# Min/max values for automatic uid selection in useradd
#
UID_MIN 1000
UID_MAX 60000
# Min/max values for automatic gid selection in groupadd
#
GID_MIN 1000
GID_MAX 60000
```

To which of the following configuration files will the required changes need to be made?

- A. /etc/login.defs
- B. /etc/security/limits.conf
- C. /etc/default/useradd
- D. /etc/profile

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 61

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is trying to remove the ACL from the file /home/user/data.txt but receives the following error message:

```
setfacl: data.txt: operation not permitted
```

Given the following analysis:

```
/dev/mapper/linux-home on /home type xfs (rw,relatime,seclabel,attr2,inode64,usrquota)
```

```
-rw-rw-r--+ 1 user staff 2354 Sep 15 16:33 data.txt
```

```
-rw-rw-r--+ user staff unconfined_u:object_r:user_home_t:s0 data.txt
```

```
# file: data.txt
```

```
# owner: user
```

```
# group: staff
```

```
user::rw-
```

```
user:accounting:rw-
```

```
group::r-
```

```
mask::rw-
```

```
other::r-
```

```
Attributes:
```

```
-----a-----
```

Which of the following is causing the error message?

- A. The administrator is not using a highly privileged account.
- B. The filesystem is mounted with the wrong options.
- C. SELinux file context is denying the ACL changes.
- D. File attributes are preventing file modification.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 62

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to create a new cloud.cpio archive containing all the files from the current directory. Which of the following commands can help to accomplish this task?

- A. ls | cpio -iv > cloud.epio
- B. ls | cpio -iv < cloud.epio
- C. ls | cpio -ov > cloud.cpio
- D. ls cpio -ov < cloud.cpio

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 63

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator made some changes in the `~/.bashrc` file and added an alias command. When the administrator tried to use the alias command, it did not work. Which of the following should be executed FIRST?

- A. `source ~/.bashrc`
- B. `read ~/.bashrc`
- C. `touch ~/.bashrc`
- D. `echo ~/.bashrc`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 64

Topic #: 1

[\[All XK0-005 Questions\]](#)

A junior systems administrator has just generated public and private authentication keys for passwordless login. Which of the following files will be moved to the remote servers?

- A. id_dsa.pem
- B. id_rsa
- C. id_ecdsa
- D. id_rsa.pub

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 65

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator cloned an existing Linux server and built a new server from that clone. The administrator encountered the following error after booting the cloned server:

```
Device mismatch detected
```

The administrator performed the commands listed below to further troubleshoot and mount the missing filesystem:

```
#ls -al /dev/disk/by-uuid/  
total 0  
drwxr-xr-x 2 root 220 Jul 08:59 .  
drwxr-xr-x 2 root 160 Jul 08:59 ..  
lrwxrwxrwx 1 root 26 Jul 11:10 2251a54-6c14-9187-df8629373 -> ../../sdb  
lrwxrwxrwx 1 root 26 Jul 11:10 4211c54-2a13-7291-bd8629373 -> ../../sdc  
lrwxrwxrwx 1 root 26 Jul 11:10 3451b54-6d10-3561-ad8629373 -> ../../sdd
```

Which of the following should administrator use to resolve the device mismatch issue and mount the disk?

- A. mount disk by device-id
- B. fsck -A
- C. mount disk by-label
- D. mount disk by-blkid

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 66

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator installed a new software program on a Linux server. When the systems administrator tries to run the program, the following message appears on the screen.

```
Hardware virtualization support is not available on this system.  
Either is not present or disabled in the system's BIOS
```

Which of the following commands will allow the systems administrator to check whether the system supports virtualization?

- A. `dmidecode -s system-version`
- B. `lscpu`
- C. `sysctl -a`
- D. `cat /sys/device/system/cpu/possible`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 67

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator created the directory `/project/access2all`. By creating this directory, the administrator is trying to avoid the deletion or modification of files from non-owners. Which of the following will accomplish this goal?

- A. `chmod +t /project/access2all`
- B. `chmod +rws /project/access2all`
- C. `chmod 2770 /project/access2all`
- D. `chmod ugo+rwx /project/access2all`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 68

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux systems administrator needs to persistently enable IPv4 forwarding in one of the Linux systems. Which of the following commands can be used together to accomplish this task? (Choose two.)

- A. `sysctl net.ipv4.ip_forward`
- B. `sysctl -w net.ipv4.ip_forward=1`
- C. `echo "net.ipv4.ip_forward=1" >> /etc/sysctl.conf`
- D. `echo 1 > /proc/sys/net/ipv4/ip_forward`
- E. `sysctl -p`
- F. `echo "net.ipv6.conf.all.forwarding=1" >> /etc/sysctl.conf`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 69

Topic #: 1

[\[All XK0-005 Questions\]](#)

Due to low disk space, a Linux administrator finding and removing all log files that were modified more than 180 days ago. Which of the following commands will accomplish this task?

- A. `find /var/log -type d -mtime +180 -print -exec rm {} \;`
- B. `find /var/log -type f -modified +180 -rm`
- C. `find /var/log -type f -mtime +180 -exec rm {} \`
- D. `find /var/log -type c -atime +180 -remove`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 70

Topic #: 1

[\[All XK0-005 Questions\]](#)

A junior administrator is setting up a new Linux server that is intended to be used as a router at a remote site. Which of the following parameters will accomplish this goal?

- A. `echo 1 > /proc/sys/net/ipv4/ip_forward`
`iptables -t nat -A PREROUTING -i eth0 -j MASQUERADE`
- B. `echo 1 > /proc/sys/net/ipv4/ip_forward`
`iptables -t nat -D POSTROUTING -o eth0 -j MASQUERADE`
- C. `echo 1 > /proc/sys/net/ipv4/ip_forward`
`iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE`
- D. `echo 1 > /proc/sys/net/ipv4/ip_forward`
`iptables -t nat -A PREROUTING -o eth0 -j MASQUERADE`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 71

Topic #: 1

[\[All XK0-005 Questions\]](#)

Some servers in an organization have been compromised. Users are unable to access to the organization's web page and other services. While reviewing the system log, a systems administrator notices messages from the kernel regarding firewall rules:

```
Oct 20 03:45:50 hostname kernel: iptables denied: IN=eth0 OUT=
MAC=xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx SRC=x.x.x.x DST=x.x.x.x LEN=1059 TOS=0x00
PREC=0x00 TTL=115 ID=31368 DF PROTO=TCP
SPT=17992 DPT=80 WINDOW=16477 RES=0x00 ACK PSH URGP=0
Oct 20 03:46:02 hostname kernel: iptables denied: IN=eth0 OUT=
MAC=xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx SRC=x.x.x.x DST=x.x.x.x LEN=52 TOS=0x00
PREC=0x00 TTL=52 ID=763 DF PROTO=TCP SPT=20229 DPT=22 WINDOW=15598 RES=0x00 ACK URGP=0
Oct 20 03:46:14 hostname kernel: iptables denied: IN=eth0 OUT=
MAC=xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx SRC=x.x.x.x DST=x.x.x.x LEN=324 TOS=0x00
PREC=0x00 TTL=49 ID=64245 PROTO=TCP SPT=47237 DPT=80 WINDOW=470 RES=0x00 ACK PSH URGP=0
Oct 20 03:46:26 hostname kernel: iptables denied: IN=eth0 OUT=
MAC=xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx SRC=x.x.x.x DST=x.x.x.x LEN=52 TOS=0x00
PREC=0x00 TTL=45 ID=2010 PROTO=TCP SPT=48322 DPT=80 WINDOW=380 RES=0x00 ACK URGP=0
```

Which of the following commands will remediate and help resolve the issue?

- A. `IPtables -A FORWARD -i eth0 -p tcp --dport 80 -j ACCEPT`
`IPtables -A FORWARD -i eth0 -p tcp --dport 22 -j ACCEPT`
- B. `IPtables -A INPUT -i eth0 -p tcp --dport 80 -j ACCEPT`
`IPtables -A INPUT -i eth0 -p tcp --dport 22 -j ACCEPT`
- C. `IPtables -A INPUT -i eth0 -p tcp --sport 80 -j ACCEPT`
`IPtables -A INPUT -i eth0 -p tcp --sport 22 -j ACCEPT`
- D. `IPtables -A INPUT -i eth0 -p tcp --dport :80 -j ACCEPT`
`IPtables -A INPUT -i eth0 -p tcp --dport :22 -j ACCEPT`

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 72

Topic #: 1

[\[All XK0-005 Questions\]](#)

A junior administrator is trying to set up a passwordless SSH connection to one of the servers. The administrator follows the instructions and puts the key in the `authorized_key` file at the server, but the administrator is still asked to provide a password during the connection.

Given the following output:

```
junior@server:~$ ls -lh .ssh/auth*  
-rw----- 1 junior junior 566 sep 13 20:56 .ssh/authorized_key
```

Which of the following commands would resolve the issue and allow an SSH connection to be established without a password?

- A. `restorecon -rv .ssh/authorized_key`
- B. `mv .ssh/authorized_key .ssh/authorized_keys`
- C. `systemctl restart sshd.service`
- D. `chmod 600 mv .ssh/authorized_key`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 73

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to resolve a service that has failed to start. The administrator runs the following command:

```
ls -l startup file
```

The following output is returned

```
----- . root root 81k Sep 13 19:01 startupfile
```

Which of the following is MOST likely the issue?

- A. The service does not have permissions to read write the startupfile.
- B. The service startupfile size cannot be 81k.
- C. The service startupfile cannot be owned by root.
- D. The service startupfile should not be owned by the root group.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 74

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux engineer is setting the sticky bit on a directory called devops with 755 file permission. Which of the following commands will accomplish this task?

- A. `chown -s 755 devops`
- B. `chown 1755 devops`
- C. `chmod -s 755 devops`
- D. `chmod 1755 devops`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 75

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator booted up the server and was presented with a non-GUI terminal. The administrator ran the command `systemctl isolate graphical.target` and rebooted the system by running `systemctl reboot`, which fixed the issue. However, the next day the administrator was presented again with a non-GUI terminal. Which of the following is the issue?

- A. The administrator did not reboot the server properly.
- B. The administrator did not set the default target to `basic.target`.
- C. The administrator did not set the default target to `graphical.target`.
- D. The administrator did not shut down the server properly.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 76

Topic #: 1

[\[All XK0-005 Questions\]](#)

Users report that connections to a MariaDB service are being closed unexpectedly. A systems administrator troubleshoots the issue and finds the following message in `/var/log/messages`:

```
dbserver kernel: out of Memory: Killed process 1234 (mysqld).
```

Which of the following is causing the connection issue?

- A. The process `mysqld` is using too many semaphores.
- B. The server is running out of file descriptors.
- C. Something is starving the server resources.
- D. The amount of RAM allocated to the server is too high.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 77

Topic #: 1

[\[All XK0-005 Questions\]](#)

A developer is trying to install an application remotely that requires a graphical interface for installation. The developer requested assistance to set up the necessary environment variables along with X11 forwarding in SSH. Which of the following environment variables must be set in remote shell in order to launch the graphical interface?

- A. \$RHOST
- B. SETENV
- C. \$SHELL
- D. \$DISPLAY

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 78

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is implementing a new service task with systems at startup and needs to execute a script entitled test.sh with the following content:

```
TIMESTAMP=$(date '+%Y-%m-%d %H:%M:%S')
echo "helpme.service: timestamp $(Timestamp)" | systemd-cat -p info
sleep 60
done
```

The administrator tries to run the script after making it executable with `chmod +x`; however, the script will not run. Which of the following should the administrator do to address this issue? (Choose two.)

- A. Add `#!/bin/bash` to the bottom of the script.
- B. Create a unit file for the new service in `/etc/systemd/system/` with the name `helpme.service` in the location.
- C. Add `#!/bin/bash` to the top of the script.
- D. Restart the computer to enable the new service.
- E. Create a unit file for the new service in `/etc/init.d` with the name `helpme.service` in the location.
- F. Shut down the computer to enable the new service.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 79

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to correct the permissions of a log file on the server. Which of the following commands should be used to set filename.log permissions to -rwxr--r-- ?

- A. `chmod 755 filename.log`
- B. `chmod 640 filename.log`
- C. `chmod 740 filename.log`
- D. `chmod 744 filename.log`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 80

Topic #: 1

[\[All XK0-005 Questions\]](#)

After listing the properties of a system account, a systems administrator wants to remove the expiration date of a user account. Which of the following commands will accomplish this task?

- A. `chgrp system accountname`
- B. `passwd -s accountname`
- C. `chmod -G system account name`
- D. `chage -E -1 accountname`

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 81

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator wants to be sure the sudo rules just added to `/etc/sudoers` are valid. Which of the following commands can be used for this task?

- A. `visudo -c`
- B. `test -f /etc/sudoers`
- C. `sudo vi check`
- D. `cat /etc/sudoers | tee test`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 82

Topic #: 1

[\[All XK0-005 Questions\]](#)

A user generated a pair of private-public keys on a workstation. Which of the following commands will allow the user to upload the public key to a remote server and enable passwordless login?

- A. `scp ~/.ssh/id_rsa user@server:~/`
- B. `rsync ~ /.ssh/ user@server:~/`
- C. `ssh-add user server`
- D. `ssh-copy-id user@server`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 83

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator created a new file system. Which of the following files must be updated to ensure the filesystem mounts at boot time?

- A. /etc/sysctl
- B. /etc/filesystems
- C. /etc/fstab
- D. /etc/nfsmount.conf

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 84

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is troubleshooting a memory-related issue. Based on the output of the commands:

```
$ vmstat -s --unit M
```

```
968 M total memory
331 M used memory
482 M active memory
279 M inactive memory
 99 M free memory
```

```
$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	968M	331M	95M	13M	540M	458M
Swap:	0	0	0			

```
$ ps -aux | grep script.sh
```

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
user	8321	2.8	40.5	3224846	371687	7	SN	16:49	2:09	/home/user/script.sh

Which of the following commands would address the issue?

- A. `top -p 8321`
- B. `kill -9 8321`
- C. `renice -10 8321`
- D. `free 8321`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 85

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator made some unapproved changes prior to leaving the company. The newly hired administrator has been tasked with revealing the system to a compliant state. Which of the following commands will list and remove the correspondent packages?

- A. dnf list and dnf remove last
- B. dnf remove and dnf check
- C. dnf info and dnf upgrade
- D. dnf history and dnf history undo last

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 86

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator transferred a key for SSH authentication to a home directory on a remote server. The key file was moved to `.ssh/authorized_keys` location in order to establish SSH connection without a password. However, the SSH command still asked for the password. Given the following output:

```
[admin@linux ~ ]$ -ls -lhZ .ssh/auth*  
-rw-r--r--. admin unconfined_u:object_r:user_home_t:s0 .ssh/authorized_keys
```

Which of the following commands would resolve the issue?

- A. `restorecon .ssh/authorized_keys`
- B. `ssh_keygen -t rsa -o .ssh/authorized_keys`
- C. `chown root:root .ssh/authorized_keys`
- D. `chmod 600 .ssh/authorized_keys`

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 87

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer needs to remove all dangling images and delete all the images that do not have an associated container. Which of the following commands will help to accomplish this task?

- A. `docker images prune -a`
- B. `docker push images -a`
- C. `docker rmi -a images`
- D. `docker images rmi --all`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 88

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux system is failing to boot with the following error:

```
error: no such partitions
Entering rescue mode...
grub rescue>
```

Which of the following actions will resolve this issue? (Choose two.)

- A. Execute `grub-install --root-directory=/mnt` and reboot.
- B. Execute `grub-install /dev/sdX` and reboot.
- C. Interrupt the boot process in the GRUB menu and add `rescue` to the kernel line.
- D. Fix the partition modifying `/etc/default/grub` and reboot.
- E. Interrupt the boot process in the GRUB menu and add `single` to the kernel line.
- F. Boot the system on a LiveCD/ISO.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 89

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to create an image named sda.img from the sda disk and store it in the /tmp directory. Which of the following commands should be used to accomplish this task?

- A. `dd of=/dev/sda if=/tmp/sda.img`
- B. `dd if=/dev/sda of=/tmp/sda.img`
- C. `dd -if=/dev/sda -of=/tmp/sda.img`
- D. `dd --of=/dev/sda --if=/tmp/sda.img`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 90

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is creating a primary partition on the replacement hard drive for an application server. Which of the following commands should the administrator issue to verify the device name of this partition?

- A. `sudo fdisk /dev/sda`
- B. `sudo fdisk -s /dev/sda`
- C. `sudo fdisk -l`
- D. `sudo fdisk -h`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 91

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is investigating why one of the servers has stopped connecting to the internet.

```
#curl http://google.com
curl: (6) Could not resolve host: google.com

#cat /etc/resolv.conf
search user.company.com company.com
#nameserver 10.10.10.10

#ip route
0.0.0.0/0 via 10.0.5.1 dev eth0 proto static metric 100
10.0.0.0/16 dev eth0 proto kernel scope link src 10.0.3.60 metric 101

#nmcli connection show
NAME                UUID                                TYPE      DEVICE
eth0                 ba4a3d30-efdc-4fa5-83d3-3721fd4aff75 ethernet  eth0
Wired connection 1  8d569d5a-22a2-356d-8532-9a2638f11b5a5 ethernet  --
```

Which of the following is causing the issue?

- A. The DNS address has been commented out in the configuration file.
- B. The search entry in the /etc/resolv.conf file is incorrect.
- C. Wired connection 1 is offline.
- D. No default route is defined.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 92

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is tasked with installing GRUB on the legacy MBR of the SATA hard drive. Which of the following commands will help the administrator accomplish this task?

- A. `grub-install /dev/hda`
- B. `grub-install /dev/sda`
- C. `grub-install /dev/sr0`
- D. `grub-install /dev/hd0,0`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 93

Topic #: 1

[\[All XK0-005 Questions\]](#)

A junior Linux administrator is tasked with installing an application. The installation guide states the application should only be installed in a run level 5 environment.

```
$ systemctl get-default  
getty.target
```

Which of the following commands would ensure the server is set to runlevel 5?

- A. `systemctl isolate multi-user.target`
- B. `systemctl isolate graphical.target`
- C. `systemctl isolate network.target`
- D. `systemctl isolate basic.target`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 94

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is tasked with adding users to the system. However, the administrator wants to ensure the users' access will be disabled once the project is over. The expiration date should be 2021-09-30. Which of the following commands will accomplish this task?

- A. `sudo useradd -e 2021-09-30 Project_user`
- B. `sudo useradd -c 2021-09-30 Project_user`
- C. `sudo modinfo -F 2021-09-30 Project_uses`
- D. `sudo useradd -m -d 2021-09-30 Project_user`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 95

Topic #: 1

[\[All XK0-005 Questions\]](#)

A DevOps engineer needs to download a Git repository from `https://git.company.com/admin/project.git`. Which of the following commands will achieve this goal?

- A. `git clone https://git.company.com/admin/project.git`
- B. `git checkout https://git.company.com/admin/project.git`
- C. `git pull https://git.company.com/admin/project.git`
- D. `git branch https://git.company.com/admin/project.git`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 96

Topic #: 1

[\[All XK0-005 Questions\]](#)

An administrator installed an application from source into `/opt/operations1/` and has received numerous reports that users are not able to access the application without having to use the full path `/opt/operations1/bin/*`. Which of the following commands should be used to resolve this issue?

- A. `echo 'export PATH=$PATH:/opt/operations1/bin' >> /etc/profile`
- B. `echo 'export PATH=/opt/operations1/bin' >> /etc/profile`
- C. `echo 'export PATH=$PATH/opt/operations1/bin' >> /etc/profile`
- D. `echo 'export $PATH:/opt/operations1/bin' >> /etc/profile`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 97

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux system is getting an error indicating the root filesystem is full. Which of the following commands should be used by the systems administrator to resolve this issue? (Choose three.)

- A. `df -h /`
- B. `fdisk -l /dev/sdb`
- C. `growpart /dev/mapper/rootvg-rootlv`
- D. `pvcreate /dev/sdb`
- E. `lvresize -L +10G -r /dev/mapper/rootvg-rootlv`
- F. `lsblk /dev/sda`
- G. `parted -l /dev/mapper/rootvg-rootlv`
- H. `vgextend /dev/rootvg /dev/sdb`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 98

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer is asked to copy the file deployment.yaml from a container to the host where the container is running. Which of the following commands can accomplish this task?

- A. `docker cp container_id/deployment.yaml deployment.yaml`
- B. `docker cp container_id:/deployment.yaml deployment.yaml`
- C. `docker cp deployment.yaml local://deployment.yaml`
- D. `docker cp container_id/deployment.yaml local://deployment.yaml`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 99

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux system is failing to start due to issues with several critical system processes. Which of the following options can be used to boot the system into the single user mode? (Choose two.)

- A. Execute the following command from the GRUB rescue shell: `mount -o remount, ro/sysroot`.
- B. Interrupt the boot process in the GRUB menu and add `systemd.unit=single` in the kernel line.
- C. Interrupt the boot process in the GRUB menu and add `systemd.unit=rescue.target` in the kernel line.
- D. Interrupt the boot process in the GRUB menu and add `single=user` in the kernel line.
- E. Interrupt the boot process in the GRUB menu and add `init=/bin/bash` in the kernel line.
- F. Interrupt the boot process in the GRUB menu and add `systemd.unit=single.target` in the kernel line.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 100

Topic #: 1

[\[All XK0-005 Questions\]](#)

A DevOps engineer needs to allow incoming traffic to ports in the range of 4000 to 5000 on a Linux server. Which of the following commands will enforce this rule?

- A. `iptables -f filter -I INPUT -p tcp --dport 4000:5000 -A ACCEPT`
- B. `iptables -t filter -A INPUT -p tcp --dport 4000:5000 -j ACCEPT`
- C. `iptables filter -A INPUT -p tcp --dport 4000:5000 -D ACCEPT`
- D. `iptables filter -S INPUT -p tcp --dport 4000:5000 -A ACCEPT`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 101

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to determine whether a hostname is in the DNS. Which of the following would supply the information that is needed?

- A. nslookup
- B. rsync
- C. netstat
- D. host

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 102

Topic #: 1

[\[All XK0-005 Questions\]](#)

A server is experiencing intermittent connection issues. Some connections to the Internet work as intended, but some fail as if there is no connectivity. The systems administrator inspects the server configuration:

Routing table:

```
default via 89.107.157.129 dev ens3 proto static metric 100
default via 10.0.5.1 dev ens11 proto dhcp metric 101
10.0.0.0/16 dev sn11 proto kernel scope link src 10.0.6.225 metric 101
89.107.157.128/26 via 89.107.157.129 dev ens3 proto static metric 100
89.107.157.129 dev ens3 proto static scope link metric 100
89.107.157.160/29 dev ens3 proto kernel scope link src 89.107.157.161 metric 100
```

IP configuration:

```
ens3:
  inet 89.107.157.161/29 brd 89.107.157.167 scope global noprefixroute ens3
ens11:
  inet 10.0.6.225/16 brd 10.0.255.255 scope global noprefixroute dynamic ens11
```

ARP table:

Address	Hwtype	Hwaddress	Flags	Mask	Iface
10.0.5.1	ether	64:d1:54:c4:75:cb	C		ens11
89.107.157.129	ether	5c:5e:ab:01:85:cf	C		ens3
89.107.157.162	ether	52:54:00:e1:44:0a	C		ens3
10.0.255.1	ether	00:50:7f:e3:aa:1c	C		ens11

```
/etc/resolv.conf:
Generated by NetworkManager
search company.com
nameserver 10.0.5.1
```

Which of the following is MOST likely the cause of the issue?

- A. An internal-only DNS server is configured.
- B. The IP netmask is wrong for ens3.
- C. Two default routes are configured.
- D. The ARP table contains incorrect entries.

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 103

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer needs to block the IP address 192.168.10.50 from accessing a Linux server. Which of the following commands will achieve this goal?

- A. `iptables -F INPUT -j 192.168.10.50 -m DROP`
- B. `iptables -A INPUT -s 192.168.10.30 -j DROP`
- C. `iptables -i INPUT --ipv4 192.168.10.50 -z DROP`
- D. `iptables -j INPUT 192.168.10.50 -p DROP`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 104

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux systems administrator is configuring a new filesystem that needs the capability to be mounted persistently across reboots. Which of the following commands will accomplish this task? (Choose two.)

- A. `df -h /data`
- B. `mkfs.ext4 /dev/sdc1`
- C. `fsck /dev/sdc1`
- D. `fdisk -l /dev/sdc1`
- E. `echo "/data /dev/sdc1 ext4 defaults 0 0" >> /etc/fstab`
- F. `echo "/dev/sdc1 /data ext4 defaults 0 0" >> /etc/fstab`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 105

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is alerted to a storage capacity issue on a server without a specific mount point or directory. Which of the following commands would be MOST helpful for troubleshooting? (Choose two.)

- A. parted
- B. df
- C. mount
- D. du
- E. fdisk
- F. dd
- G. ls

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 106

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator pressed Ctrl+Z after starting a program using the command line, and the shell prompt was presented. In order to go back to the program, which of the following commands can the administrator use?

- A. fg
- B. su
- C. bg
- D. ed

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 107

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator received a notification that a system is performing slowly. When running the top command, the systems administrator can see the following values:

```
%Cpu(s): 2.7 us, 1.9 sy, 0.0 ni, 0.4 id, 95 wa, 0.0 hi, 0.0 si 0.0 st
```

Which of the following commands will the administrator most likely run NEXT?

- A. vmstat
- B. strace
- C. htop
- D. lsof

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 108

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following technologies provides load balancing, encryption, and observability in containerized environments?

- A. Virtual private network
- B. Sidecar pod
- C. Overlay network
- D. Service mesh

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 109

Topic #: 1

[\[All XK0-005 Questions\]](#)

A development team asks an engineer to guarantee the persistency of journal log files across system reboots. Which of the following commands would accomplish this task?

- A. `grep -i auto /etc/systemd/journald.conf && systemctl restart systemd-journald.service`
- B. `cat /etc/systemd/journald.conf | awk '(print $1,$3)'`
- C. `sed -i 's/auto/persistent/g' /etc/systemd/journald.conf && sed -i 'persistent/s/^###q' /etc/systemd/journald.conf`
- D. `journalctl --list-boots && systemctl restart systemd-journald.service`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 110

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is receiving tickets from users who cannot reach the application app that should be listening on port 9443/tcp on a Linux server.

To troubleshoot the issue, the systems administrator runs netstat and receives the following output:

```
# netstat -anp | grep appd | grep -w LISTEN
tcp 0 0 127.0.0.1:9443 0.0.0.0:* LISTEN 1234/appd
```

Based on the information above, which of the following is causing the issue?

- A. The IP address 0.0.0.0 is not valid.
- B. The application is listening on the loopback interface.
- C. The application is listening on port 1234.
- D. The application is not running.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 111

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is troubleshooting a connectivity issue pertaining to access to a system named db.example.com. The system IP address should be 192.168.20.88. The administrator issues the dig command and receives the following output:

```
;; ANSWER SECTION:  
db.example.com.      15 IN A 192.168.20.89
```

The administrator runs `grep db.example.com /etc/hosts` and receives the following output:

```
192.168.20.89 db.example.com
```

Given this scenario, which of the following should the administrator do to address this issue?

- A. Modify the `/etc/hosts` file and change the db.example.com entry to 192.168.20.89.
- B. Modify the `/etc/network` file and change the db.example.com entry to 192.168.20.88.
- C. Modify the `/etc/network` file and change the db.example.com entry to 192.168.20.89.
- D. Modify the `/etc/hosts` file and change the db.example.com entry to 192.168.20.88.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 112

Topic #: 1

[\[All XK0-005 Questions\]](#)

Users have been unable to reach www.comptia.org from a Linux server. A systems administrator is troubleshooting the issue and does the following:

Output 1:

```
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default qlen 1000
    link/ether ac:11:22:33:44:cd brd ff:ff:ff:ff:ff:ff
    inet 192.168.168.10/24 brd 192.168.169.255 scope global dynamic noprefixroute eth0
        valid_lft 8097sec preferred_lft 8097sec
    inet fe80::4daf:8c7c:a6ff:2771/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
```

Output 2:

```
nameserver 192.168.168.53
```

Output 3:

```
FING 192.168.168.53 (192.168.168.53) 56(84) bytes of data.
64 bytes from 192.168.168.53: icmp_seq=1 ttl=64 time=2.85 ms
```

```
--- 192.168.168.53 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 2.847/2.847/2.847/0.000 ms
```

Output 4:

```
192.168.168.0/24 dev eth0 proto kernel scope link src 192.168.168.10 metric 600
```

Output 5:

```
...
;; QUESTION SECTION:
;www.comptia.org. IN A

;; ANSWER SECTION:
. 0 CLASS4096 OPT 10 8 LgmNvk0AazU=

;; ADDITIONAL SECTION:
www.comptia.org. 3385 IN A 23.96.239.26
...
```

Based on the information above, which of the following is causing the issue?

- A. The name www.comptia.org does not point to a valid IP address.
- B. The server 192.168.168.53 is unreachable.
- C. No default route is set on the server.
- D. The network interface eth0 is disconnected.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 113

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems technician is working on deploying several microservices to various RPM-based systems, some of which could run up to two hours. Which of the following commands will allow the technician to execute those services and continue deploying other microservices within the same terminal session?

- A. `gedit & disown`
- B. `kill %1`
- C. `fg %1`
- D. `bg %1 job name`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 114

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator was notified that a virtual server has an I/O bottleneck. The Linux administrator analyzes the following output:

```
root@linux:~# uptime
18:43:47 up 1 day, 19:58, 1 user, load average: 9.90, 5.83, 2.49
root@linux:~# vmstat 10 10
procs -----memory----- --swap----- ----io---- -system- -----cpu-----

  r  b swpd   free   buff   cache   si     so  bi     bo     in     cs  us  sy  id  wa  st
 13  0  5520 141228 98932 2325312  0      2  10     28    192   167  1   0  99  0   0
 10  0  5608 131280 98932 2325324  0 26211  0 26211  342   393 91   9   0  0   0
 10  0  5528   1096 98932 2325324  0  5242  0  5242  333   402 96   4   0  0   0

root@linux:~# free -m
              total  used    free  shared buff/cache  available
Mem:          3933  1454    110     33     2368     2202
Swap:         1497     5    1491
```

Given there is a single CPU in the sever, which of the following is causing the slowness?

- A. The system is running out of swap space.
- B. The CPU is overloaded.
- C. The memory is exhausted.
- D. The processes are paging.

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 115

Topic #: 1

[\[All XK0-005 Questions\]](#)

Employees in the finance department are having trouble accessing the file /opt/work/file. All IT employees can read and write the file. Systems administrator reviews the following output:

```
admin@server:/opt/work$ ls -al file
-rw-rw----+ 1 root it 4 Sep 5 17:29 file
```

Which of the following commands would permanently fix the access issue while limiting access to IT and finance department employees?

- A. `chattr +i file`
- B. `chown it:finance file`
- C. `chmod 666 file`
- D. `setfacl -m g:finance:rw file`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 116

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux engineer needs to create a custom script, cleanup.sh, to run at boot as part of the system services. Which of the following processes would accomplish this task?

A. Create a unit file in the /etc/default/ directory.

systemctl enable cleanup

systemctl is-enabled cleanup

B. Create a unit file in the /etc/ske1/ directory.

systemctl enable cleanup

systemctl is-enabled cleanup

C. Create a unit file in the /etc/systemd/system/ directory.

systemctl enable cleanup

systemctl is-enabled cleanup

D. Create a unit file in the /etc/sysctl.d/ directory.

systemctl enable cleanup

systemctl is-enabled cleanup

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 117

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux system is failing to boot. The following error is displayed in the serial console:

```
[[1;33mDEPEND[0m] Dependency failed for /data.
```

```
[[1;33mDEPEND[0m] Dependency failed for Local File Systems
```

```
...
```

```
Welcome to emergency mode! After logging in, type "journalctl -xb" to view system logs, "systemctl reboot" to reboot, "systemctl default" to try again to boot into default mode.
```

```
Give root password for maintenance
```

```
(or type Control-D to continue)
```

Which of the following files will need to be modified for this server to be able to boot again?

A. /etc/mtab

B. /dev/sda

C. /etc/fstab

D. /etc/grub.conf

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 118

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator frequently connects to a remote host via SSH and a non-standard port. The systems administrator would like to avoid passing the port parameter on the command line every time. Which of the following files can be used to set a different port value for that host?

- A. /etc/ssh/sshd_config
- B. /etc/ssh/moduli
- C. ~/.ssh/config
- D. ~/.ssh/authorized_keys

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 119

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator modified the SSH configuration file. Which of the following commands should be used to apply the configuration changes?

- A. `systemctl stop sshd`
- B. `systemctl mask sshd`
- C. `systemctl reload sshd`
- D. `systemctl start sshd`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 120

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer needs to check the link status of a network interface named eth1 in a Linux server. Which of the following commands can help to achieve the goal?

- A. `ifconfig hw eth1`
- B. `netstat -r eth1`
- C. `ss -ti eth1`
- D. `ip link show eth1`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 121

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is tasked with setting up key-based SSH authentication. In which of the following locations should the administrator place the public keys for the server?

- A. `~/.sshd/authkeys`
- B. `~/.ssh/keys`
- C. `~/.ssh/authorized_keys`
- D. `~/.ssh/keyauth`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 122

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to create a new user named user02. However, user02 must be in a different home directory, which is under /comptia/projects. Which of the following commands will accomplish this task?

- A. `useradd -d /comptia/projects user02`
- B. `useradd -m /comptia/projects user02`
- C. `useradd -b /comptia/projects user02`
- D. `useradd -s /comptia/projects user02`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 123

Topic #: 1

[\[All XK0-005 Questions\]](#)

One leg of an LVM-mirrored volume failed due to the underlying physical volume, and a systems administrator is troubleshooting the issue. The following output has been provided:

```
Partial mode. Incomplete volume groups will be activated read-only
```

LV	VG	Attr	LSize	Origin	Snap% ¹	Move	Log	Copy% ²	Devices
linear	vg	-wi-a-	40.00G						unknown device(0)
stripe	vg	-wi-a-	40.00G						unknown device(5120), /dev/sda1(0)

Given this scenario, which of the following should the administrator do to recover this volume?

- A. Reboot the server. The volume will automatically go back to linear mode.
- B. Replace the failed drive and reconfigure the mirror.
- C. Reboot the server. The volume will revert to stripe mode.
- D. Recreate the logical volume.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 124

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator created a new Docker image called test. After building the image, the administrator forgot to version the release. Which of the following will allow the administrator to assign the v1 version to the image?

- A. docker image save test test:v1
- B. docker image build test:vl
- C. docker image tag test test:vl
- D. docker image version test:v1

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 125

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux systems administrator receives a notification that one of the server's filesystems is full. Which of the following commands would help the administrator to identify this filesystem?

- A. lsblk
- B. fdisk
- C. df -h
- D. du -ah

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 126

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is notified that the mysqld process stopped unexpectedly. The systems administrator issues the following command:

```
sudo grep -i -r 'out of memory' /var/log
```

The output of the command shows the following:

```
kernel: Out of memory: Kill process 9112 (mysqld) score 511 or sacrifice child.
```

Which of the following commands should the systems administrator execute NEXT to troubleshoot this issue? (Select two).

- A. free -h
- B. nc -v 127.0.0.1 3306
- C. renice -15 \$(pidof mysql)
- D. lsblk
- E. killall -15
- F. vmstat -a 1 4

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 127

Topic #: 1

[\[All XK0-005 Questions\]](#)

Users have reported that the interactive sessions were lost on a Linux server. A Linux administrator verifies the server was switched to rescue.target mode for maintenance. Which of the following commands will restore the server to its usual target?

- A. telinit 0
- B. systemctl reboot
- C. systemctl get-default
- D. systemctl emergency

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 128

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator was tasked with assigning the temporary IP address/netmask 192.168.168.1/255.255.255.255 to the interface eth0 of a Linux server.

When adding the address, the following error appears:

```
# ip address add 192.168.168.1/33 dev eth0
```

Error: any valid prefix is expected rather than "192.168.168.1/33".

Based on the command and its output above, which of the following is the cause of the issue?

- A. The CIDR value /33 should be /32 instead.
- B. There is no route to 192.168.168.1/33.
- C. The interface eth0 does not exist.
- D. The IP address 192.168.168.1 is already in use.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 129

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux user reported the following error after trying to connect to the system remotely: ssh: connect to host 10.0.1.10 port 22: Resource temporarily unavailable
The Linux systems administrator executed the following commands in the Linux system while trying to diagnose this issue:

```
# netstat -an | grep 22 | grep LISTEN
tcp        0          0  0.0.0.0:22          0.0.0.0:*        LISTEN

# firewall-cmd --list-all
public (active)
  target: default
  icmp-block-inversion: no
  interfaces: eth0
  sources:
  services: dhcpv6-client
  ports:
  protocols:
  masquerade: no
    forward-ports:
    source-ports:
    icmp-blocks:
    rich rules:
```

Which of the following commands will resolve this issue?

- A. firewall-cmd --zone=public --permanent --add-service=22
- B. systemctl enable firewalld; systemctl restart firewalld
- C. firewall-cmd --zone=public --permanent --add-service=ssh
- D. firewall-cmd --zone=public --permanent --add-port=22/udp

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 130

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator has been tasked with installing the most recent versions of packages on a RPM-based OS. Which of the following commands will accomplish this task?

- A. apt-get upgrade
- B. rpm -a
- C. yum updateinfo
- D. dnf update
- E. yum check-update

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 131

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to expand a volume group using a new disk. Which of the following options presents the correct sequence of commands to accomplish the task?

A. partprobe

vgcreate

lvextend

B. lvcreate

fdisk

partprobe

C. fdisk

partprobe

mkfs

D. fdisk

pvcreate

vgextend

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 132

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following directories is the mount point in a UEFI system?

- A. /sys/efi
- B. /boot/efi
- C. /efi
- D. /etc/efi

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 133

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator copied a Git repository locally, created a feature branch, and committed some changes to the feature branch. Which of the following Git actions should the Linux administrator use to publish the changes to the main branch of the remote repository?

- A. rebase
- B. tag
- C. commit
- D. push

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 134

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator needs to obtain a list of all volumes that are part of a volume group. Which of the following commands should the administrator use to accomplish this task?

- A. vgs
- B. lvs
- C. fdisk -l
- D. pvs

[Show Suggested Answer](#)





Actual exam question from CompTIA's XK0-005

Question #: 135

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is adding a new configuration file to a Git repository. Which of the following describes the correct order of Git commands to accomplish the task successfully?

- A. pull -> push -> add -> checkout
- B. pull -> add -> commit -> push
- C. checkout -> push -> add -> pull
- D. pull -> add -> push -> commit

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 136

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is tasked with mounting a USB drive on a system. The USB drive has a single partition, and it has been mapped by the system to the device `/dev/sdb`. Which of the following commands will mount the USB to `/media/usb`?

- A. `mount /dev/sdb1 /media/usb`
- B. `mount /dev/sdb0 /media/usb`
- C. `mount /dev/sdb /media/usb`
- D. `mount -t usb /dev/sdb1 /media/usb`

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 137

Topic #: 1

[\[All XK0-005 Questions\]](#)

User1 is a member of the accounting group. Members of this group need to be able to execute but not make changes to a script maintained by User2. The script should not be accessible to other users or groups. Which of the following will give proper access to the script?

A. `chown user2:accounting script.sh`

`chmod 750 script.sh`

B. `chown user1:accounting script.sh`

`chmod 777 script.sh`

C. `chown accounting:user1 script.sh`

`chmod 057 script.sh`

D. `chown user2:accounting script.sh`

`chmod u+x script.sh`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 138

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator needs to verify whether the built container has the app.go file in its root directory. Which of the following can the administrator use to verify the root directory has this file?

- A. docker image inspect
- B. docker container inspect
- C. docker exec <container_name> ls
- D. docker ps <container_name>

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 139

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is reviewing changes to a configuration file that includes the following section:

```
tls:
  certificates:
    - certFile: /etc/ssl/cert.cer
      keyFile: /etc/ssl/cert.key
      stores: default
    - certFile: /etc/ssl/expired.cer
      keyFile: /etc/ssl/expired.key
      stores: expired
```

The Linux administrator is trying to select the appropriate syntax formatter to correct any issues with the configuration file. Which of the following should the syntax formatter support to meet this goal?

- A. Markdown
- B. XML
- C. YAMLD. JSON

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 140

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is investigating an issue in which one of the servers is not booting up properly. The journalctl entries show the following:

```
Sep 16 20:30:43 server kernel: acpi PNP0A03:00: _OSC failed (AE_NOT_FOUND);  
-- Subject: Unit dev-mapper-centos\x2dapp.device has failed  
Sep 16 20:32:15 server systemd[1]: Dependency failed for /opt/app  
-- Subject: Unit opt-app.mount has failed  
-- Unit opt-app.mount has failed  
Sep 16 20:32:15 server systemd[1]: Dependency failed for Local File Systems.  
-- Subject: Unit local-fs.target has failed  
-- Unit local-fs.target has failed.  
Sep 16 20:32:15 server systemd[1]: Dependency failed for Relabel all filesystem, if necessary.  
-- Subject: Unit rhel-autorelabel.service has failed  
-- Unit rhel-autorelabel.service has failed.
```

Which of the following will allow the administrator to boot the Linux system to normal mode quickly?

- A. Comment out the /opt/app filesystem in /etc/fstab and reboot.
- B. Reformat the /opt/app filesystem and reboot.
- C. Perform filesystem checks on local filesystems and reboot.
- D. Trigger a filesystem relabel and reboot.

Show Suggested Answer

Actual exam question from CompTIA's XK0-005

Question #: 141

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux systems administrator receives reports from various users that an application hosted on a server has stopped responding at similar times for several days in a row. The administrator logs in to the system and obtains the following output:

Output 1:

```
[Tue Aug 31 16:36:42 2021] OOM: Kill process 43805 (java) score 249 or sacrifice child
[Tue Aug 31 16:36:42 2021] killed process 43805 (java) total-vm: 4446352kB, anon-rss: 4053140kB, file-rss: 68kB
```

Output 2:

```
Linux 3.10.0-328.13.1.x86_64 #1 (hostname) 31/08/2021 _x86_64_ (8 CPU)
16:00:01 PM      CPU      %user   %nice    %system   %iowait  %steal     %idle
16:10:01 PM    all     17.58    0.00     9.36     0.00     0.00     73.06
16:20:01 PM    all     22.34    0.00    11.75     0.00     0.00     65.91
16:30:01 PM    all     25.49    0.00    11.69     0.00         0     62.82
```

Output 3:

```
$ free -m
              total        used        free   shared  buff/cache   available
Mem:        16704      15026         174        92         619         793
Swap:         0           0           0
```

Which of the following should the administrator do to provide the BEST solution for the reported issue?

- A. Configure memory allocation policies during business hours and prevent the Java process from going into a zombie state while the server is idle.
- B. Configure a different nice value for the Java process to allow for more users and prevent the Java process from restarting during business hours.
- C. Configure more CPU cores to allow for the server to allocate more processing and prevent the Java process from consuming all of the available resources.
- D. Configure the swap space to allow for spikes in usage during peak hours and prevent the Java process from stopping due to a lack of memory.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 142

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator found many containers in an exited state. Which of the following commands will allow the administrator to clean up the containers in an exited state?

- A. `docker rm --all`
- B. `docker rm $(docker ps -aq)`
- C. `docker images prune *`
- D. `docker rm --state exited`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 143

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator reviews a set of log output files and needs to identify files that contain any occurrence of the word denied. All log files containing entries in uppercase or lowercase letters should be included in the list. Which of the following commands should the administrator use to accomplish this task?

- A. `find . -type f -print | xargs grep -ln denied`
- B. `find . -type f -print | xargs grep -nv denied`
- C. `find . -type f -print | xargs grep -wL denied`
- D. `find . -type f -print | xargs grep -li denied`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 144

Topic #: 1

[\[All XK0-005 Questions\]](#)

A cloud engineer needs to launch a container named web-01 in background mode. Which of the following commands will accomplish this task?

- A. `docker builder -f --name web-01 httpd`
- B. `docker load --name web-01 httpd`
- C. `docker ps -a --name web-01 httpd`
- D. `docker run -d --name web-01 httpd`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 145

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is providing a new Nginx image from the registry to local cache. Which of the following commands would allow this to happen?

- A. docker pull nginx
- B. docker attach nginx
- C. docker commit nginx
- D. docker import nginx

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 146

Topic #: 1

[\[All XK0-005 Questions\]](#)

Which of the following tools is BEST suited to orchestrate a large number of containers across many different servers?

- A. Kubernetes
- B. Ansible
- C. Podman
- D. Terraform

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 147

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator is installing a web server and needs to check whether web traffic has already been allowed through the firewall. Which of the following commands should the administrator use to accomplish this task?

- A. `firewalld query-service-http`
- B. `firewall-cmd --check-service http`
- C. `firewall-cmd --query-service http`
- D. `firewalld --check-service http`

[Show Suggested Answer](#)



Actual exam question from CompTIA's XK0-005

Question #: 148

Topic #: 1

[\[All XK0-005 Questions\]](#)

A systems administrator is encountering performance issues. The administrator runs a command with the following output:

```
09:10:18 up 457 days, 32min, 5 users, load average: 4.22 6.63 5.58
```

The Linux server has the following system properties:

CPU 4 vCPU -

Memory: 50GB -

Which of the following accurately describes this situation?

- A. The system is under CPU pressure and will require additional vCPUs.
- B. The system has been running for over a year and requires a reboot.
- C. Too many users are currently logged in to the system.
- D. The system requires more memory.

Show Suggested Answer



Actual exam question from CompTIA's XK0-005

Question #: 149

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux administrator has set up a new DNS forwarder and is configuring all internal servers to use the new forwarder to look up external DNS requests. The administrator needs to modify the firewall on the server for the DNS forwarder to allow the internal servers to communicate to it and make the changes persistent between server reboots. Which of the following commands should be run on the DNS forwarder server to accomplish this task?

- A. `ufw allow out dns`
- B. `systemctl reload firewalld`
- C. `iptables -A OUTPUT -p udp -m udp -dport 53 -j ACCEPT`
- D. `firewall-cmd --zone=public --add-port=53/udp --permanent`

Show Suggested Answer





Actual exam question from CompTIA's XK0-005

Question #: 150

Topic #: 1

[\[All XK0-005 Questions\]](#)

A Linux engineer receives reports that files created within a certain group are being modified by users who are not group members. The engineer wants to reconfigure the server so that only file owners and group members can modify new files by default. Which of the following commands would accomplish this task?

- A. `chmod 775`
- B. `umask. 002`
- C. `chattr -Rv`
- D. `chown -cf`

Show Suggested Answer

