Homework review:
Setting umask to 022 only sets for the current shell, if you log out then log back in you are in a new shell and umask reverts to default.

Set umask in /etc/skel/.profile first then it will apply to all new users.
Use ls -a to see inside of /etc/skel

Use adduser and addgroup (do not use useradd or groupadd) adduser is a higher level command and will work better.

READ MANPAGE:
Manpage has a synopsis portion, it shows commands and identifies multiple options. Square brackets mean optional

If it has - or – those dashes are required.

Example: shows a command that you could type, and what should happen.
See also is a place to get more options.

Man umask doesn’t exist; it is a programmer’s manual.

Man the .bash shell, then type /umask and it will skip forward to the next occurrence of umask, type n to move to the next occurrence of umask. Keep going until you find the umask info you are looking for.

ls -help will not give you a manpage, but it will give you a brief description of how they work. This will give you all of the info in one long page.
ls -help less will show you the info one page at a time.
spacebar to move to nest page.
Enter goes one line at a time
q to quit
b goes back one page
p go to top
FILE SYSTEMS-------------------

File systems are organized into blocks. Info is spread across disk but appears continuous to user.
Partition (the portion of the disk we are dealing with) 1024 bytes each.

Super block is a collection of meta data that keeps track of the way things are organized.
The two main parts of the Superblock we are concerned with are the **i-node table** and the **free-list**.

The **free-list** is a list of blocks in the partition that are free, not assigned to store data. When a file is created the code in OS allocates the correct number of blocks to hold the data. If a file is 1025 bytes, it will need one full block 1024 bytes plus one byte from a new block. The new block is now allocated to this file and cannot be used by another.

**ls** will report how much data a file is using in bytes
**du** will list the amount of blocks used by the file

A file may be stored in block 3 and block 7 but not in 4-6.
The **i-node table** tracks: user permission, owner, group, mode GID, UID and block list (the list of blocks belonging to that file)
**ls –l** information comes from the i-node table

If you write a lot of small files, you could fill the i-node table and the remaining free space in the partition would be unusable.

Formatting only writes the super block.