RAID - Exercise 1

Business Profile:

Acme Telecom is involved in mobile wireless services across the United States and has about 5000 employees worldwide. This company is Chicago based and has 7 regional offices across the country. Although Acme is doing well financially, they continue to feel competitive pressure. As a result, the company needs to ensure that the IT infrastructure takes advantage of fault tolerant features.

Current Situation/Issues:

- The company uses a number of different applications for communication, accounting, and management. All the applications are hosted on individual servers with disks configured as RAID 0.
- All financial activity is managed and tracked by a single accounting application. It is very important for the accounting data to be highly available.
- The application performs around 15% write operations, and the remaining 85 % are reads.
- The accounting data is currently stored on a 5-disk RAID 0 set. Each disk has an advertised formatted capacity of 200 GB, and the total size of their files is 730 GB.
- The company performs nightly backups and removes old information—so the amount of data is unlikely to change much over the next 6 months.

The company is approaching the end of the financial year and the IT budget is depleted. Buying even one new disk drive will not be possible.

How would you suggest that the company restructure their environment? You will need to justify your choice based on cost, performance, and availability of the new solution.

RAID level to use:
Advantages:
Disadvantages: