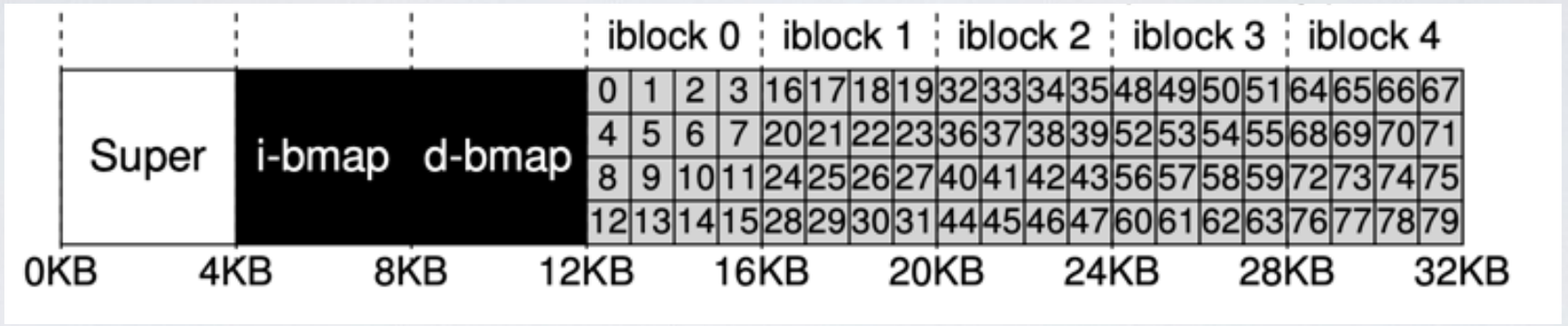
Decoding inodes



What disk sector to read to retrieve inode 32?

1. Calculate the offset (each inode is 256 bytes)
   $32 \times 256 = 8{,}192$
2. Add the start of the address of the inode table (12K)
   $8{,}192 + 12 \times 1{,}024 = 20{,}480$ (20 KB)
3. Find the corresponding disk sector (each sector is 512 bytes)
   $(20 \times 1{,}024) / 512 = 40$

Unix Inode (simplified)

Size	Name	Description
2	`mode`	can the file be read/written/executed
2	`uid`	file owner id
4	`size`	the file size in bytes
4	`time`	time the file was last accessed
4	`ctime`	time when the file created
4	`mtime`	time when the file was last modified
4	`dtime`	time when the inode was deleted
2	`gid`	file group owner id
2	`links_count`	number of hard links pointing to this file
4	`blocks`	the number of blocks allocated to this file
60	`block`	disk pointers (15 in total)
4	`file_acl`	ACL permissions
4	`dir_acl`	ACL permissions