

Assume that three I/O devices are connected to a 32-bit, 10 MIPS CPU. The first device is a floppy drive with a transfer rate of 25KB/sec over a 16-bit bus. The second device is a keyboard that must be polled thirty times per second. The third device is a hard drive with a maximum transfer rate of 1MB/sec. It has a 32-bit bus. Assuming that the polling operation requires 20 instructions for each I/O device, determine the percentage of CPU time required to poll each device.