The R&D dept. is planning to bid on a large project for the development of a new communication system for commercial planes. The accompanying table shows the activities, time & sequence required:

|  |  |  |
| --- | --- | --- |
| Activity | Immediate predecessor | Time (weeks) |
| A | --- | 3 |
| B | A | 2 |
| C | A | 4 |
| D | A | 4 |
| E | B | 6 |
| F | C,D | 6 |
| G | D,F | 2 |
| H | D | 3 |
| I | E,G,H | 3 |

1. What is the critical path?
2. Suppose you want to shorten the completion time as much as possible, & you have the option of shortening any or all of B,C,D, and G each one week. Which would you shorten?
3. What is the new critical path & earliest completion time? (from b’s answer I think)

Please solve using Microsoft Excel & show any work if possible. Thanks!