27.1 "Unreasonable" deadlines are a fact of life in the software business. How should you proceed if you're faced with one?

Document your reservations using quantitative arguments derived from past project metrics. Then suggest an incremental approach that offers to deliver partial functionality in the time allotted with complete functionality following.

27.12. Assume you are a software project manager and that you've been asked to compute earned value statistics for a small software project. The project has 56 planned work tasks that are estimated to require 582 person-days to complete. At the time that you've been asked to do the earned value analysis, 12 tasks have been completed. However the project schedule indicates that 15 tasks should have been completed. The following scheduling data (in person-days) are available:

Task	Planned Effort	Actual Effort
1	12.0	12.5
2	15.0	11.0
3	13.0	17.0
4	8.0	9.5
5	9.5	9.0
6	18.0	19.0
7	10.0	10.0
8	4.0	4.5
9	12.0	10.0
10	6.0	6.5
11	5.0	4.0
12	14.0	14.5
13	16.0	—
14	6.0	—
15	8.0	—

Use the steps defined in Section 24.6 of Pressman to compute earned value. First sum all planned effort through task 12. In this case,

BCWS = 126.50
BAC = 156.50
BCWP = 127.50

SPI = BCWP/BCWS = 127.5/126.5 = 1.008
SV = BCWP - BCWS = 127.5 - 126.5 = 1.0 person-day

percent complete = BCWP/BAC = 81%

Other earned-value data are computed in the same way