1. **The Global Tea and Organic Juice companies have merged.**
   1. **Compute the expected time for each activity.**
   2. **Compute the variance for each activity.**
2. **Compute the expected project duration.**
3. **What is the probability of completing the project by day 112?**
4. **What is the probability of completing ‘Negotiate with Unions’ by day 90?**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Activity | Opt. (a) | Ml. (m) | | Pess. (b) | tee | Variance [(*b - a*)/ 6]2 |
| 1 | 16 | 19 | 28 | |  |  |
| 2 | 30 | 30 | 30 | |  |  |
| 3 | 60 | 72 | 90 | |  |  |
| 4 | 18 | 27 | 30 | |  |  |
| 5 | 17 | 29 | 47 | |  |  |
| 6 | 4 | 7 | 10 | |  |  |
| 7 | 12 | 15 | 18 | |  |  |
| 8 | 6 | 12 | 24 | |  |  |
| 9 | 18 | 27 | 30 | |  |  |
| 10 | 20 | 35 | 50 | |  |  |
| 11 | 40 | 55 | 100 | |  |  |
| 12 | 11 | 20 | 29 | |  |  |
| 13 | 14 | 23 | 26 | |  |  |
| 14 | 13 | 16 | 19 | |  |  |
| 15 | 0 | 0 | 0 | |  |  |