57. Ben Fun, Inc., manufactures video games. Market saturation and technological innovations have caused pricing pressures, which have resulted in declining profits. To stem the slide in profits until new products can be introduced, top management has turned its attention to both manufacturing economies and increased production. To realize these objectives, an incentive program has been developed to reward production manager who contribute to an increase in the number of units produced and effect cost reductions.

The production managers have responded to the pressure of improving manufacturing in several ways that have results increased completed units over normal production levels. The video game machines are put together by the programming group (PG) and the group (GG). To attain increased production levels, PG and GG groups commenced rejecting games that previously would have been tested and modified to meet manufacturing standards. Preventive maintenance on machines used in the production of these games has been postponed, with only emergency repair work being performed to keep production lines moving. This decision has been disconcerting to maintenance personnel, who are concerned that this could result in serious breakdowns and unsafe operating conditions.

The more aggressive assembly group production supervisors have pressured maintenance personnel to attend to their machines at the expense of other groups. This has resulted in machine downtime in the PG and GG groups, which, when coupled with demands for accelerated delivery by the assembly group, has led to more frequent rejections and increased friction among departments.

Ben Fun operates under a standard cost system. The standard costs for video games are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| Cost Item | Quantity | Cost | Total |
| **Direct Materials** |  |  |  |
| CD | 1 | $20.00 | $20.00 |
| Package | 1 | 15.00 | 15.00 |
| Labels | 2 | 1.00 | 2.00 |
| **Direct Labor** |  |  |  |
| Assembly | 2 hours | 8.00 | 16.00 |
| PG group | 1 hour | 9.00 | 9.00 |
| GG group | 1.5 hours | 10.00 | 15.00 |
| **Variable Overhead** | 4.5 hours | 2.00 | 9.00 |
| **Total Standard Cost per Unit** |  |  | $86.00 |

Ben Fun prepares monthly performance reports based on standard costs. Presented in the following table is the contribution report for May, when production and sales both reached 2,200 units:

|  |  |  |  |
| --- | --- | --- | --- |
| **BEN FUN, INC. CONTRIBUTION REPORT FOR MAY** | | | |
|  | Budget | Actual | Variance |
| Units | 2,000 | 2,200 | 200F |
| **Revenue** | $200,000 | $220,000 | $20,000F |
| **Variable Costs** |  |  |  |
| Direct materials | $74,000 | $85,000 | $11,600U |
| Direct labor | $80,000 | 93,460 | 13,460U |
| Variable overhead | 18,000 | 18,800 | 800U |
| Total variable costs | $172,000 | $197,860 | $25,860U |
| **Contribution Margin** | $28,000 | $22,140 | $5,860U |

Ben Fun’s top management was surprised by unfavorable contribution margin, given the increased sales in May. Al Miller, the cost accountant, was assigned to identify and report on the reasons for the unfavorable contribution margin results as well as the individuals or groups responsible. After completing his review, Miller prepared the following usage report:

|  |  |  |  |
| --- | --- | --- | --- |
| **BEN FUN, INC. USAGE REPORT FOR MAY** | | | |
|  | | **Quantity** | **Actual Cost** |
| **Direct Materials** | |  |  |
| CDs | | 2,200 units | $44,000 |
| Package | | 2,200 units | 35,000 |
| Labels | | 4,400 units | 6,600 |
| **Direct Labor** | |  |  |
| Assembly | | 3,900 hours | 31,200 |
| CDs | 2,400 hours | | 23,760 |
| Packages/labels | 3,500 hours | | 38,500 |
| **Variable Overhead** | 9,800 hours | | 18,800 |
| **Total Variable Cost** |  | | $197,860 |

Miller reported that the PG and GG groups supported the increased production levels but experienced abnormal machine downtime, causing idle labor, which required the use of overtime to keep up with the accelerated demand for parts. The idle time was charged to direct labor. Miller also reported that the production managers of these two groups resorted to parts rejection as opposed to testing and modification procedures as used in the past. Miller determined that the assembly group met management’s objectives by increasing production while using lower-than-standard hours.

Required

1. For May, Ben Fun’s labor rate variance was$5,660 unfavorable, and the labor efficiency variance was $200 favorable. By using these two variances and calculating the following five variance, prepare an explanation of the $5,860 unfavorable variance between budgeted and actual contribution margin during May.
   1. Material price variance
   2. Material quantity variance
   3. Variable overhead efficiency variance
   4. Variable overhead spending variance
   5. Sales volume variance
2. Tell the story of the variance
3. Identify and briefly explain the behavioral factors that may promote friction among the production managers and between the production managers and the maintenance manager.
4. Evaluate Al Miller’s analysis of the unfavorable contribution results in terms of its completeness and its effect on the behavior of the production groups. What decisions need to be made about increasing the contribution margin?