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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Question Type | Difficulty | LO1: Materials variances | LO2: Direct labor variances | LO3: Variable overhead variances | LO4: Fixed overhead variances (App 10A) | LO5: Journal entries (App 10B) | Professional exam adapted |
|  | 1 | T/F | M |  |  |  |  | x |  |
|  | 2 | T/F | M |  |  |  |  | x |  |
|  | 3 | T/F | E |  |  |  |  | x |  |
|  | 4 | T/F | E |  |  |  |  | x |  |
|  | 5 | T/F | E |  |  |  |  | x |  |
|  | 6 | T/F | M |  |  |  |  | x |  |
|  | 7 | T/F | M |  |  |  |  | x |  |
|  | 8 | T/F | E |  |  |  |  | x |  |
|  | 9 | T/F | M |  |  |  |  | x |  |
|  | 10 | T/F | E |  |  |  |  | x |  |
|  | 11 | T/F | M |  |  |  |  | x |  |
|  | 12 | T/F | M |  |  |  |  | x |  |
|  | 13 | Conceptual M/C | M | x |  |  |  | x |  |
|  | 14 | Conceptual M/C | M | x |  |  |  | x |  |
|  | 15 | Conceptual M/C | M | x |  |  |  | x |  |
|  | 16 | Conceptual M/C | H |  | x |  |  | x |  |
|  | 17 | Conceptual M/C | M |  | x |  |  | x |  |
|  | 18 | Conceptual M/C | M |  | x |  |  | x |  |
|  | 19 | Singlepart M/C | E | x |  |  |  | x |  |
|  | 20 | Singlepart M/C | E |  | x |  |  | x |  |
|  | 21 | Singlepart M/C | E |  | x |  |  | x |  |
|  | 22 | Singlepart M/C | E |  | x |  |  | x |  |
|  | 23 | Singlepart M/C | E |  | x |  |  | x |  |
|  | 24 | Singlepart M/C | M |  | x |  |  | x |  |
|  | 25 | Singlepart M/C | E |  |  |  |  | x |  |
|  | 26 | Singlepart M/C | E |  |  |  |  | x |  |
|  | 27 | Singlepart M/C | E |  |  |  |  | x |  |
|  | 28 | Singlepart M/C | E |  |  |  |  | x |  |
|  | 29 | Singlepart M/C | E |  |  |  |  | x |  |
|  | 30 | Singlepart M/C | E |  |  |  |  | x |  |
| APP10B-Ref1 | 31-33 | Multipart M/C | H | x | x |  |  | x |  |
| APP10B-Ref2 | 34-37 | Multipart M/C | M | x |  |  |  | x |  |
| APP10B-Ref3 | 38-41 | Multipart M/C | M | x |  |  |  | x |  |
| APP10B-Ref4 | 42-44 | Multipart M/C | M |  | x |  |  | x |  |
| APP10B-Ref5 | 45-47 | Multipart M/C | M |  | x |  |  | x |  |
|  | 48 | Problem | H | x | x | x |  | x |  |
|  | 49 | Problem | E | x |  |  |  | x |  |
|  | 50 | Problem | M | x |  |  |  | x |  |
|  | 51 | Problem | M | x |  |  |  | x |  |
|  | 52 | Problem | E | x |  |  |  | x |  |
|  | 53 | Problem | E |  | x |  |  | x |  |
|  | 54 | Problem | E |  | x |  |  | x |  |
|  | 55 | Problem | E |  | x |  |  | x |  |
|  | 56 | Problem | E |  | x |  |  | x |  |

Appendix 10B

Journal Entries to Record Variances

**True / False Questions**

|  |  |
| --- | --- |
| 1. | If the actual quantity of materials used is less than the standard quantity of materials allowed for the actual output, then the journal entry to record the Direct Materials Quantity Variance would be a debit.    True    False |

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| --- | --- |
| 2. | If the actual purchase price for materials exceeds the standard purchase price, then the journal entry to record the Direct Materials Price Variance would be a credit.    True    False |

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| --- | --- |
| 3. | An unfavorable labor rate variance is recorded as a debit in the Labor Rate Variance account.    True    False |

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| --- | --- |
| 4. | A favorable labor efficiency variance is recorded as a debit in the Labor Efficiency Variance account.    True    False |

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| --- | --- |
| 5. | An unfavorable labor efficiency variance is recorded as a debit in the Labor Efficiency Variance account.    True    False |

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| 6. | If the actual direct labor-hours used is less than the standard direct labor-hours allowed for the actual output, then the journal entry to record the Labor Efficiency Variance would be a credit.    True    False |

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| 7. | A favorable labor efficiency variance would result in a debit balance in the labor efficiency variance account.    True    False |

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| --- | --- |
| 8. | An unfavorable materials quantity variance is recorded as a debit in the Materials Quantity Variance account.    True    False |

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| --- | --- |
| 9. | A favorable materials quantity variance would appear as a credit in a journal entry.    True    False |

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| --- | --- |
| 10. | An unfavorable materials price variance is recorded as a debit in the Materials Price Variance account.    True    False |

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| 11. | If the actual rate per direct labor-hour exceeds the standard rate per direct labor-hour, then the journal entry to record the Labor Rate Variance would be a debit.    True    False |

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| 12. | If the actual rate per direct labor-hour is less than the standard rate per direct labor-hour, then the journal entry to record the Labor rate variance would be a credit.    True    False |

**Multiple Choice Questions**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. | When the actual amount of a raw material used in production is greater than the standard amount allowed for the actual output, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Raw Materials; Credit to Materials Quantity Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Materials Quantity Variance |  |  |  | | --- | --- | | C. | Credit to Raw Materials; Debit to Materials Quantity Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Materials Quantity Variance | |

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| 14. | When the actual price to purchase a raw material on account exceeds its standard price, the journal entry would include:      |  |  | | --- | --- | | A. | Debit to Raw Materials; Credit to Materials Price Variance |  |  |  | | --- | --- | | B. | Debit to Accounts Payable; Credit to Materials Price Variance |  |  |  | | --- | --- | | C. | Debit to Raw Materials; Debit to Materials Price Variance |  |  |  | | --- | --- | | D. | Debit to Accounts Payable; Debit to Materials Price Variance | |

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| 15. | When the actual price to purchase a raw material on account is less than its standard price, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Raw Materials; Credit to Materials Price Variance |  |  |  | | --- | --- | | B. | Credit to Accounts Payable; Credit to Materials Price Variance |  |  |  | | --- | --- | | C. | Credit to Raw Materials; Debit to Materials Price Variance |  |  |  | | --- | --- | | D. | Credit to Accounts Payable; Debit to Materials Price Variance | |

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| 16. | The journal entry below:      indicates that:      |  |  | | --- | --- | | A. | the total labor variance was $800, unfavorable. |  |  |  | | --- | --- | | B. | employees received an unexpected rate increase during the period. |  |  |  | | --- | --- | | C. | more labor time was required to complete the output of the period than was allowed at standard. |  |  |  | | --- | --- | | D. | Work in Process valued at $25,000 was completed and transferred to Finished Goods. | |

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| 17. | When the actual direct labor-hours exceeds the standard direct labor-hours allowed for the actual output of the period, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Wages Payable; Credit to Labor Efficiency Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Labor Efficiency Variance |  |  |  | | --- | --- | | C. | Credit to Wages Payable; Debit to Labor Efficiency Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Labor Efficiency Variance | |

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| 18. | When the actual wage rate paid to direct labor workers exceeds the standard wage rate, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Wages Payable; Credit to Labor Rate Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Labor Rate Variance |  |  |  | | --- | --- | | C. | Credit to Wages Payable; Debit to Labor Rate Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Labor Rate Variance | |

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| 19. | During the month of May, Marian Manufacturing Corporation purchased materials that had a total standard cost of $37,000. The Materials Price Variance on these materials was $6,000 favorable. What summary journal entry would Domino make to record this purchase and variance for May?      |  |  | | --- | --- | | A. |  |  |  |  | | --- | --- | | B. |  |  |  |  | | --- | --- | | C. |  |  |  |  | | --- | --- | | D. |  | |

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| 20. | Liukko Corporation's standard wage rate is $14.90 per direct labor-hour (DLH) and according to the standards, each unit of output requires 2.8 DLHs. In June, 1,800 units were produced, the actual wage rate was $15.80 per DLH, and the actual hours were 5,110 DLHs. The Labor Efficiency Variance for June would be recorded as a:      |  |  | | --- | --- | | A. | debit of $1,106. |  |  |  | | --- | --- | | B. | credit of $1,106. |  |  |  | | --- | --- | | C. | credit of $1,043. |  |  |  | | --- | --- | | D. | debit of $1,043. | |

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| 21. | Gainer Corporation's standard wage rate is $11.70 per direct labor-hour (DLH) and according to the standards, each unit of output requires 3.9 DLHs. In February, 7,800 units were produced, the actual wage rate was $12.50 per DLH, and the actual hours were 29,940 DLHs. The Labor Rate Variance for February would be recorded as a:      |  |  | | --- | --- | | A. | debit of $23,952. |  |  |  | | --- | --- | | B. | credit of $23,952. |  |  |  | | --- | --- | | C. | credit of $24,336. |  |  |  | | --- | --- | | D. | debit of $24,336. | |

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| 22. | Miolen Corporation has provided the following data concerning its direct labor costs for June:      The Labor Efficiency Variance for June would be recorded as a:      |  |  | | --- | --- | | A. | credit of $50,128. |  |  |  | | --- | --- | | B. | debit of $46,272. |  |  |  | | --- | --- | | C. | debit of $50,128. |  |  |  | | --- | --- | | D. | credit of $46,272. | |

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| 23. | Barbu Corporation has provided the following data concerning its direct labor costs for June:      The Labor Rate Variance for June would be recorded as a:      |  |  | | --- | --- | | A. | credit of $6,305. |  |  |  | | --- | --- | | B. | credit of $6,500. |  |  |  | | --- | --- | | C. | debit of $6,305. |  |  |  | | --- | --- | | D. | debit of $6,500. | |

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| 24. | Results of operations for the Anderson Corporation indicated that the actual direct labor rate for May was $9.75 while the standard rate was $10.00. The general ledger entry to record the incurrence of direct labor cost would include:      |  |  | | --- | --- | | A. | a debit to Work In Process for the actual number of hours times $9.75 per hour. |  |  |  | | --- | --- | | B. | a debit to Work In Process for the standard number of hours times $10.00 per hour. |  |  |  | | --- | --- | | C. | a debit to Work In Process for the standard number of hours times $9.75 per hour. |  |  |  | | --- | --- | | D. | a debit to Work In Process for the actual number of hours times $10.00 per hour. | |

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| 25. | Gramajo Corporation's standard wage rate is $10.10 per direct labor-hour (DLH) and according to the standards, each unit of output requires 3.4 DLHs. In February, 2,400 units were produced, the actual wage rate was $9.40 per DLH, and the actual hours were 7,920 DLHs. In the journal entry to record the incurrence of direct labor costs in February, the Work in Process entry would consist of a:      |  |  | | --- | --- | | A. | credit of $74,448. |  |  |  | | --- | --- | | B. | debit of $74,448. |  |  |  | | --- | --- | | C. | debit of $82,416. |  |  |  | | --- | --- | | D. | credit of $82,416. | |

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| 26. | Slife Corporation has provided the following data concerning its most important raw material, compound G81N:      When recording the use of materials in production, Raw Materials would be:      |  |  | | --- | --- | | A. | debited for $68,558. |  |  |  | | --- | --- | | B. | credited for $83,839. |  |  |  | | --- | --- | | C. | credited for $68,558. |  |  |  | | --- | --- | | D. | debited for $83,839. | |

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| 27. | Compound K72R is used to make Munuz Corporation's major product. The standard cost of compound K72R is $43.90 per ounce and the standard quantity is 1.4 ounces per unit of output. In the most recent month, 120 ounces of the compound were used to make 100 units of the output. When recording the use of materials in production, Raw Materials would be:      |  |  | | --- | --- | | A. | debited for $5,268. |  |  |  | | --- | --- | | B. | credited for $6,146. |  |  |  | | --- | --- | | C. | credited for $5,268. |  |  |  | | --- | --- | | D. | debited for $6,146. | |

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| 28. | Data concerning the direct labor costs for March of Boler Corporation appear below:      The journal entry to record the incurrence of direct labor costs in March would include the following for Work in Process:      |  |  | | --- | --- | | A. | credit of $125,139. |  |  |  | | --- | --- | | B. | debit of $114,948. |  |  |  | | --- | --- | | C. | credit of $114,948. |  |  |  | | --- | --- | | D. | debit of $125,139. | |

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| 29. | Marusarz Corporation has provided the following data concerning its most important raw material, compound F55M:      When recording the purchase of materials, Raw Materials would be:      |  |  | | --- | --- | | A. | credited for $74,120. |  |  |  | | --- | --- | | B. | debited for $73,270. |  |  |  | | --- | --- | | C. | debited for $74,120. |  |  |  | | --- | --- | | D. | credited for $73,270. | |

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| 30. | Compound B73G is used to make Vasconcellos Corporation's major product. The standard cost of B73G is $27.60 per ounce and the standard quantity is 8.6 ounces per unit of output. In the most recent month, 3,200 ounces of the raw material were purchased at a cost of $26.70 per ounce. When recording the purchase of materials, Raw Materials would be:      |  |  | | --- | --- | | A. | debited for $88,320. |  |  |  | | --- | --- | | B. | debited for $85,440. |  |  |  | | --- | --- | | C. | credited for $85,440. |  |  |  | | --- | --- | | D. | credited for $88,320. | |

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|  | Widman, Inc. makes and sells only one product and uses standard costing. The standard cost sheet for one unit of product includes the following:  • Direct materials: 5 grams at $0.35 per gram • Direct labor: 1 hour at $8 per hour  Last period the company had the following results:  • 5,000 grams of direct materials purchased at $0.40 per gram • 4,000 grams of direct materials used in production • 900 units of product were made • 850 hours of direct labor were used at $8.50 per hour |

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| 31. | The journal entry to record the purchase of direct materials last period would include:      |  |  | | --- | --- | | A. | Raw materials $2,000, Debit; materials price variance $250, Credit |  |  |  | | --- | --- | | B. | Raw materials $1,750, Debit; materials price variance $250, Credit |  |  |  | | --- | --- | | C. | Raw materials $2,000, Debit; materials price variance $250, Debit |  |  |  | | --- | --- | | D. | Raw materials $1,750, Debit; materials price variance $250, Debit | |

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| 32. | The journal entry to record the use of direct materials in production last period would include:      |  |  | | --- | --- | | A. | Work in process $1,400, Debit; materials quantity variance $175, Debit |  |  |  | | --- | --- | | B. | Work in process $1,575, Debit; materials quantity variance $175, Credit |  |  |  | | --- | --- | | C. | Work in process $1,400, Debit; materials quantity variance $175, Credit |  |  |  | | --- | --- | | D. | Work in process $1,575, Debit; materials quantity variance $175, Debit | |

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| 33. | The journal entry to record the incurrence of direct labor cost last period would include:      |  |  | | --- | --- | | A. | Work in process $7,200, Debit; labor efficiency variance $400, Credit |  |  |  | | --- | --- | | B. | Work in process $7,200, Debit; labor efficiency variance $400, Debit |  |  |  | | --- | --- | | C. | Work in process $6,800, Debit; labor rate variance $425, Debit |  |  |  | | --- | --- | | D. | Work in process $6,800, Debit; labor rate variance $425, Credit | |

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|  | Compound K52E is a raw material used to make Pinkos Corporation's major product. The standard cost of compound K52E is $46.00 per ounce and the standard quantity is 5.0 ounces per unit of output. Data concerning the compound for March appear below:      The raw material was purchased on account. |

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| 34. | The debits to the Raw Materials account for March would total:      |  |  | | --- | --- | | A. | $170,200 |  |  |  | | --- | --- | | B. | $172,420 |  |  |  | | --- | --- | | C. | $184,000 |  |  |  | | --- | --- | | D. | $164,220 | |

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| 35. | The credits to the Raw Materials account for March would total:      |  |  | | --- | --- | | A. | $172,420 |  |  |  | | --- | --- | | B. | $184,000 |  |  |  | | --- | --- | | C. | $170,200 |  |  |  | | --- | --- | | D. | $164,220 | |

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| 36. | The Materials Price Variance for March would be recorded as a:      |  |  | | --- | --- | | A. | Debit of $2,220 |  |  |  | | --- | --- | | B. | Debit of $2,142 |  |  |  | | --- | --- | | C. | Credit of $2,220 |  |  |  | | --- | --- | | D. | Credit of $2,142 | |

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| 37. | The Materials Quantity Variance for March would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $19,780 |  |  |  | | --- | --- | | B. | Credit of $5,980 |  |  |  | | --- | --- | | C. | Debit of $19,780 |  |  |  | | --- | --- | | D. | Debit of $5,980 | |

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|  | Florea Corporation has provided the following data concerning its most important raw material, compound K09B:      The raw material was purchased on account. |

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| 38. | The debits to the Raw Materials account for August would total:      |  |  | | --- | --- | | A. | $39,750 |  |  |  | | --- | --- | | B. | $15,900 |  |  |  | | --- | --- | | C. | $14,840 |  |  |  | | --- | --- | | D. | $40,050 | |

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| 39. | The credits to the Raw Materials account for August would total:      |  |  | | --- | --- | | A. | $40,050 |  |  |  | | --- | --- | | B. | $14,840 |  |  |  | | --- | --- | | C. | $39,750 |  |  |  | | --- | --- | | D. | $15,900 | |

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| 40. | The Materials Price Variance for August would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $112 |  |  |  | | --- | --- | | B. | Credit of $300 |  |  |  | | --- | --- | | C. | Debit of $112 |  |  |  | | --- | --- | | D. | Debit of $300 | |

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| 41. | The Materials Quantity Variance for August would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $24,910 |  |  |  | | --- | --- | | B. | Credit of $1,060 |  |  |  | | --- | --- | | C. | Debit of $1,060 |  |  |  | | --- | --- | | D. | Debit of $24,910 | |

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|  | Enwall Corporation's standard wage rate is $11.20 per direct labor-hour (DLH) and according to the standards, each unit of output requires 2.9 DLHs. In December, 5,900 units were produced, the actual wage rate was $10.20 per DLH, and the actual hours were 14,150 DLHs. |

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| 42. | In the journal entry to record the incurrence of direct labor costs in December, the Work in Process entry would consist of a:      |  |  | | --- | --- | | A. | credit of $144,330. |  |  |  | | --- | --- | | B. | debit of $191,632. |  |  |  | | --- | --- | | C. | debit of $144,330. |  |  |  | | --- | --- | | D. | credit of $191,632. | |

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| 43. | The Labor Rate Variance for December would be recorded as a:      |  |  | | --- | --- | | A. | debit of $14,150. |  |  |  | | --- | --- | | B. | credit of $17,110. |  |  |  | | --- | --- | | C. | debit of $17,110. |  |  |  | | --- | --- | | D. | credit of $14,150. | |

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| 44. | The Labor Efficiency Variance for December would be recorded as a:      |  |  | | --- | --- | | A. | debit of $33,152. |  |  |  | | --- | --- | | B. | credit of $30,192. |  |  |  | | --- | --- | | C. | credit of $33,152. |  |  |  | | --- | --- | | D. | debit of $30,192. | |

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|  | Cafferty Corporation has provided the following data concerning its direct labor costs for March: |

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| 45. | The journal entry to record the incurrence of direct labor costs in March would include the following for Work in Process:      |  |  | | --- | --- | | A. | Credit of $33,280 |  |  |  | | --- | --- | | B. | Debit of $35,625 |  |  |  | | --- | --- | | C. | Debit of $33,280 |  |  |  | | --- | --- | | D. | Credit of $35,625 | |

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| 46. | The Labor Rate Variance for March would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $855 |  |  |  | | --- | --- | | B. | Credit of $780 |  |  |  | | --- | --- | | C. | Debit of $780 |  |  |  | | --- | --- | | D. | Debit of $855 | |

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| 47. | The Labor Efficiency Variance for March would be recorded as a:      |  |  | | --- | --- | | A. | Debit of $3,200 |  |  |  | | --- | --- | | B. | Credit of $3,125 |  |  |  | | --- | --- | | C. | Credit of $3,200 |  |  |  | | --- | --- | | D. | Debit of $3,125 | |

**Essay Questions**

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| 48. | Albert Manufacturing Company manufactures a single product. The standard cost of one unit of this product is:      During the month of October, 6,000 units were produced. Selected cost data relating to the month's production follow:      There was no beginning inventory of raw materials. The variable overhead rate is based on direct labor-hours.  **Required:**  a. For direct materials, compute the price and quantity variances for the month, and prepare journal entries to record activity for the month. b. For direct labor, compute the rate and efficiency variances for the month, and prepare a journal entry to record labor activity for the month. c. For variable overhead, compute the rate variance for the month. |

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| 49. | Ungvarsky Corporation has provided the following data concerning its most important raw material, compound J38F:      The raw material was purchased on account.  **Required:**  a. Record the purchase of the raw material in a journal entry. b. Record the use of the raw material in production in a journal entry. |

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| 50. | The standards for product F28 call for 2.7 pounds of a raw material that costs $16.50 per pound. Last month, 4,100 pounds of the raw material were purchased for $70,520. The actual output of the month was 1,300 units of product F28. A total of 3,500 pounds of the raw material were used to produce this output.  **Required:**  a. What is the materials price variance for the month? b. What is the materials quantity variance for the month? c. Prepare journal entries to record the purchase and use of the raw material during the month. (All raw materials are purchased on account.) |

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| 51. | The following standards have been established for a raw material used in the production of product G13:      The following data pertain to a recent month's operations:      **Required:**  a. What is the materials price variance for the month? b. What is the materials quantity variance for the month? c. Prepare journal entries to record the purchase and use of the raw material during the month. (All raw materials are purchased on account.) |

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| 52. | Compound C65Z is used by Sinkey Corporation to make one of its products. The standard cost of compound C65Z is $21.10 per ounce and the standard quantity is 2.0 ounces per unit of output. Data concerning the compound in the most recent month appear below:      The raw material was purchased on account.  **Required:**  a. Record the purchase of the raw material in a journal entry. b. Record the use of the raw material in production in a journal entry. |

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| 53. | Pinkney Corporation has provided the following data concerning its direct labor costs for November:      **Required:**  Prepare the journal entry to record the incurrence of direct labor costs. |

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| 54. | The direct labor standards at Hebden Corporation are $10.30 per direct labor-hour (DLH) and 3.4 DLHs per unit of output. In December, 7,800 units were produced, the actual wage rate was $9.90 per DLH, and the actual hours were 21,340 DLHs.  **Required:**  Prepare the journal entry to record the incurrence of direct labor costs. |

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| 55. | The standards for product Q58W specify 8.4 direct labor-hours per unit at $14.00 per direct labor-hour. Last month 400 units of product Q58W were produced using 2,800 direct labor-hours at a total direct labor wage cost of $41,020.  **Required:**  a. What was the labor rate variance for the month? b. What was the labor efficiency variance for the month? c. Prepare a journal entry to record direct labor costs during the month, including the direct labor variances. |

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| 56. | The following direct labor standards have been established for product N30A:      The following data pertain to the most recent month's operations during which 400 units of product N30A were made:      **Required:**  a. What was the labor rate variance for the month? b. What was the labor efficiency variance for the month? c. Prepare a journal entry to record direct labor costs during the month, including the direct labor variances. |

Appendix 10B Journal Entries to Record Variances Answer Key

**True / False Questions**

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| 1. | If the actual quantity of materials used is less than the standard quantity of materials allowed for the actual output, then the journal entry to record the Direct Materials Quantity Variance would be a debit.    **FALSE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 2. | If the actual purchase price for materials exceeds the standard purchase price, then the journal entry to record the Direct Materials Price Variance would be a credit.    **FALSE** |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 3. | An unfavorable labor rate variance is recorded as a debit in the Labor Rate Variance account.    **TRUE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 4. | A favorable labor efficiency variance is recorded as a debit in the Labor Efficiency Variance account.    **FALSE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 5. | An unfavorable labor efficiency variance is recorded as a debit in the Labor Efficiency Variance account.    **TRUE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 6. | If the actual direct labor-hours used is less than the standard direct labor-hours allowed for the actual output, then the journal entry to record the Labor Efficiency Variance would be a credit.    **TRUE** |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 7. | A favorable labor efficiency variance would result in a debit balance in the labor efficiency variance account.    **FALSE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 8. | An unfavorable materials quantity variance is recorded as a debit in the Materials Quantity Variance account.    **TRUE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 9. | A favorable materials quantity variance would appear as a credit in a journal entry.    **TRUE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 10. | An unfavorable materials price variance is recorded as a debit in the Materials Price Variance account.    **TRUE** |

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| *AACSB: Reflective Thinking AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Understand Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 11. | If the actual rate per direct labor-hour exceeds the standard rate per direct labor-hour, then the journal entry to record the Labor Rate Variance would be a debit.    **TRUE** |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 12. | If the actual rate per direct labor-hour is less than the standard rate per direct labor-hour, then the journal entry to record the Labor rate variance would be a credit.    **TRUE** |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

**Multiple Choice Questions**

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| 13. | When the actual amount of a raw material used in production is greater than the standard amount allowed for the actual output, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Raw Materials; Credit to Materials Quantity Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Materials Quantity Variance |  |  |  | | --- | --- | | **C.** | Credit to Raw Materials; Debit to Materials Quantity Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Materials Quantity Variance | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 14. | When the actual price to purchase a raw material on account exceeds its standard price, the journal entry would include:      |  |  | | --- | --- | | A. | Debit to Raw Materials; Credit to Materials Price Variance |  |  |  | | --- | --- | | B. | Debit to Accounts Payable; Credit to Materials Price Variance |  |  |  | | --- | --- | | **C.** | Debit to Raw Materials; Debit to Materials Price Variance |  |  |  | | --- | --- | | D. | Debit to Accounts Payable; Debit to Materials Price Variance | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 15. | When the actual price to purchase a raw material on account is less than its standard price, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Raw Materials; Credit to Materials Price Variance |  |  |  | | --- | --- | | **B.** | Credit to Accounts Payable; Credit to Materials Price Variance |  |  |  | | --- | --- | | C. | Credit to Raw Materials; Debit to Materials Price Variance |  |  |  | | --- | --- | | D. | Credit to Accounts Payable; Debit to Materials Price Variance | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 16. | The journal entry below:      indicates that:      |  |  | | --- | --- | | A. | the total labor variance was $800, unfavorable. |  |  |  | | --- | --- | | B. | employees received an unexpected rate increase during the period. |  |  |  | | --- | --- | | **C.** | more labor time was required to complete the output of the period than was allowed at standard. |  |  |  | | --- | --- | | D. | Work in Process valued at $25,000 was completed and transferred to Finished Goods. | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 3 Hard Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 17. | When the actual direct labor-hours exceeds the standard direct labor-hours allowed for the actual output of the period, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Wages Payable; Credit to Labor Efficiency Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Labor Efficiency Variance |  |  |  | | --- | --- | | **C.** | Credit to Wages Payable; Debit to Labor Efficiency Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Labor Efficiency Variance | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 18. | When the actual wage rate paid to direct labor workers exceeds the standard wage rate, the journal entry would include:      |  |  | | --- | --- | | A. | Credit to Wages Payable; Credit to Labor Rate Variance |  |  |  | | --- | --- | | B. | Credit to Work-In-Process; Credit to Labor Rate Variance |  |  |  | | --- | --- | | **C.** | Credit to Wages Payable; Debit to Labor Rate Variance |  |  |  | | --- | --- | | D. | Credit to Work-In-Process; Debit to Labor Rate Variance | |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Analyze Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 19. | During the month of May, Marian Manufacturing Corporation purchased materials that had a total standard cost of $37,000. The Materials Price Variance on these materials was $6,000 favorable. What summary journal entry would Domino make to record this purchase and variance for May?      |  |  | | --- | --- | | A. |  |  |  |  | | --- | --- | | B. |  |  |  |  | | --- | --- | | **C.** |  |  |  |  | | --- | --- | | D. |  |   Work In Process is debited with the standard cost of $37,000. The favorable price variance of $6,000 is a credit. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 20. | Liukko Corporation's standard wage rate is $14.90 per direct labor-hour (DLH) and according to the standards, each unit of output requires 2.8 DLHs. In June, 1,800 units were produced, the actual wage rate was $15.80 per DLH, and the actual hours were 5,110 DLHs. The Labor Efficiency Variance for June would be recorded as a:      |  |  | | --- | --- | | A. | debit of $1,106. |  |  |  | | --- | --- | | B. | credit of $1,106. |  |  |  | | --- | --- | | C. | credit of $1,043. |  |  |  | | --- | --- | | **D.** | debit of $1,043. |   SH = 1,800 units × 2.8 hours per unit = 5,040 hours Labor efficiency variance = (AH - SH) × SR = (5,110 hours - 5,040 hours) × $14.90 per hour = (70 hours) × $14.90 per hour = $1,043 U Unfavorable variances are debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 21. | Gainer Corporation's standard wage rate is $11.70 per direct labor-hour (DLH) and according to the standards, each unit of output requires 3.9 DLHs. In February, 7,800 units were produced, the actual wage rate was $12.50 per DLH, and the actual hours were 29,940 DLHs. The Labor Rate Variance for February would be recorded as a:      |  |  | | --- | --- | | **A.** | debit of $23,952. |  |  |  | | --- | --- | | B. | credit of $23,952. |  |  |  | | --- | --- | | C. | credit of $24,336. |  |  |  | | --- | --- | | D. | debit of $24,336. |   Labor rate variance = AH × (AR - SR) = 29,940 hours × ($12.50 per hour - $11.70 per hour) = 29,940 hours × ($0.80 per hour) = $23,952 U Unfavorable variances are debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 22. | Miolen Corporation has provided the following data concerning its direct labor costs for June:      The Labor Efficiency Variance for June would be recorded as a:      |  |  | | --- | --- | | A. | credit of $50,128. |  |  |  | | --- | --- | | B. | debit of $46,272. |  |  |  | | --- | --- | | **C.** | debit of $50,128. |  |  |  | | --- | --- | | D. | credit of $46,272. |   SH = 8,500 units × 7.7 hours per units = 65,450 hours Labor efficiency variance = (AH - SH) × SR = (70,270 hours - 65,450 hours) × $10.40 per hour = (4,820 hours) × $10.40 per hour = $50,128 U Unfavorable variances are debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 23. | Barbu Corporation has provided the following data concerning its direct labor costs for June:      The Labor Rate Variance for June would be recorded as a:      |  |  | | --- | --- | | **A.** | credit of $6,305. |  |  |  | | --- | --- | | B. | credit of $6,500. |  |  |  | | --- | --- | | C. | debit of $6,305. |  |  |  | | --- | --- | | D. | debit of $6,500. |   Labor rate variance = AH × (AR - SR) = 12,610 hours × ($12.70 per hour - $13.20 per hour) = 12,610 hours × (-$0.50 per hour) = $6,305 F Favorable variances are credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 24. | Results of operations for the Anderson Corporation indicated that the actual direct labor rate for May was $9.75 while the standard rate was $10.00. The general ledger entry to record the incurrence of direct labor cost would include:      |  |  | | --- | --- | | A. | a debit to Work In Process for the actual number of hours times $9.75 per hour. |  |  |  | | --- | --- | | **B.** | a debit to Work In Process for the standard number of hours times $10.00 per hour. |  |  |  | | --- | --- | | C. | a debit to Work In Process for the standard number of hours times $9.75 per hour. |  |  |  | | --- | --- | | D. | a debit to Work In Process for the actual number of hours times $10.00 per hour. |   Work In Process is debited for the standard cost of the output. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 25. | Gramajo Corporation's standard wage rate is $10.10 per direct labor-hour (DLH) and according to the standards, each unit of output requires 3.4 DLHs. In February, 2,400 units were produced, the actual wage rate was $9.40 per DLH, and the actual hours were 7,920 DLHs. In the journal entry to record the incurrence of direct labor costs in February, the Work in Process entry would consist of a:      |  |  | | --- | --- | | A. | credit of $74,448. |  |  |  | | --- | --- | | B. | debit of $74,448. |  |  |  | | --- | --- | | **C.** | debit of $82,416. |  |  |  | | --- | --- | | D. | credit of $82,416. |   Work in Process is debited for the standard cost of materials in the actual output of the period which is: 2,400 units × 3.4 DLHs per unit × $10.10 per DLH = 8,160 DLHs × $10.10 per DLH = $82,416. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 26. | Slife Corporation has provided the following data concerning its most important raw material, compound G81N:      When recording the use of materials in production, Raw Materials would be:      |  |  | | --- | --- | | A. | debited for $68,558. |  |  |  | | --- | --- | | B. | credited for $83,839. |  |  |  | | --- | --- | | **C.** | credited for $68,558. |  |  |  | | --- | --- | | D. | debited for $83,839. |   Raw Materials is debited for the standard cost of the materials used which is 1,660 liters × $41.30 per liter = $68,558. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 27. | Compound K72R is used to make Munuz Corporation's major product. The standard cost of compound K72R is $43.90 per ounce and the standard quantity is 1.4 ounces per unit of output. In the most recent month, 120 ounces of the compound were used to make 100 units of the output. When recording the use of materials in production, Raw Materials would be:      |  |  | | --- | --- | | A. | debited for $5,268. |  |  |  | | --- | --- | | B. | credited for $6,146. |  |  |  | | --- | --- | | **C.** | credited for $5,268. |  |  |  | | --- | --- | | D. | debited for $6,146. |   Raw materials is credited for the standard cost of the materials used in production which is 120 ounces × $43.90 per ounce = $5,268. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 28. | Data concerning the direct labor costs for March of Boler Corporation appear below:      The journal entry to record the incurrence of direct labor costs in March would include the following for Work in Process:      |  |  | | --- | --- | | A. | credit of $125,139. |  |  |  | | --- | --- | | **B.** | debit of $114,948. |  |  |  | | --- | --- | | C. | credit of $114,948. |  |  |  | | --- | --- | | D. | debit of $125,139. |   Work in Process is debited for the standard cost of materials in the actual output of the period which is: 3,600 units × 3.1 ounces per unit × $10.30 per ounce = 11,160 ounces × $10.30 per ounce = $114,948. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 29. | Marusarz Corporation has provided the following data concerning its most important raw material, compound F55M:      When recording the purchase of materials, Raw Materials would be:      |  |  | | --- | --- | | A. | credited for $74,120. |  |  |  | | --- | --- | | B. | debited for $73,270. |  |  |  | | --- | --- | | **C.** | debited for $74,120. |  |  |  | | --- | --- | | D. | credited for $73,270. |   Raw Materials is credited for the standard cost of the materials purchased which is 1,700 liters × $43.60 per liter = $74,120. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 30. | Compound B73G is used to make Vasconcellos Corporation's major product. The standard cost of B73G is $27.60 per ounce and the standard quantity is 8.6 ounces per unit of output. In the most recent month, 3,200 ounces of the raw material were purchased at a cost of $26.70 per ounce. When recording the purchase of materials, Raw Materials would be:      |  |  | | --- | --- | | **A.** | debited for $88,320. |  |  |  | | --- | --- | | B. | debited for $85,440. |  |  |  | | --- | --- | | C. | credited for $85,440. |  |  |  | | --- | --- | | D. | credited for $88,320. |   Raw materials is debited for the standard cost of the materials purchased which is 3,200 ounces × $27.60 per ounce = $88,320. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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|  | Widman, Inc. makes and sells only one product and uses standard costing. The standard cost sheet for one unit of product includes the following:  • Direct materials: 5 grams at $0.35 per gram • Direct labor: 1 hour at $8 per hour  Last period the company had the following results:  • 5,000 grams of direct materials purchased at $0.40 per gram • 4,000 grams of direct materials used in production • 900 units of product were made • 850 hours of direct labor were used at $8.50 per hour |

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| 31. | The journal entry to record the purchase of direct materials last period would include:      |  |  | | --- | --- | | A. | Raw materials $2,000, Debit; materials price variance $250, Credit |  |  |  | | --- | --- | | B. | Raw materials $1,750, Debit; materials price variance $250, Credit |  |  |  | | --- | --- | | C. | Raw materials $2,000, Debit; materials price variance $250, Debit |  |  |  | | --- | --- | | **D.** | Raw materials $1,750, Debit; materials price variance $250, Debit |   Raw materials is debited for the standard cost of the materials purchased which is 5,000 grams × $0.35 per gram = $1,750.  Materials price variance = AQ × (AP - SP) = 5,000 grams × ($0.40 per gram - $0.35 per gram) = 5,000 grams × ($0.05 per gram) = $250 U An unfavorable variance is debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 3 Hard Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 32. | The journal entry to record the use of direct materials in production last period would include:      |  |  | | --- | --- | | A. | Work in process $1,400, Debit; materials quantity variance $175, Debit |  |  |  | | --- | --- | | **B.** | Work in process $1,575, Debit; materials quantity variance $175, Credit |  |  |  | | --- | --- | | C. | Work in process $1,400, Debit; materials quantity variance $175, Credit |  |  |  | | --- | --- | | D. | Work in process $1,575, Debit; materials quantity variance $175, Debit |   SQ = 900 units × 5.0 grams per unit = 4,500 grams Work in process is debited for the standard cost of the materials allowed for the actual output which is 4,500 grams × $0.35 per gram = $1,575  Materials quantity variance = (AQ - SQ) × SP = (4,000 grams - 4,500 grams) × $0.35 per gram = (-500 grams) × $0.35 per gram = $175 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 3 Hard Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 33. | The journal entry to record the incurrence of direct labor cost last period would include:      |  |  | | --- | --- | | **A.** | Work in process $7,200, Debit; labor efficiency variance $400, Credit |  |  |  | | --- | --- | | B. | Work in process $7,200, Debit; labor efficiency variance $400, Debit |  |  |  | | --- | --- | | C. | Work in process $6,800, Debit; labor rate variance $425, Debit |  |  |  | | --- | --- | | D. | Work in process $6,800, Debit; labor rate variance $425, Credit |   Work in process would be debited for the standard labor cost for the actual output which is $8.00 per hour × 1.00 hours per unit × 900 units = $7,200  Labor rate variance = AH × (AR - SR) = 850 hours × ($8.50 per hour - $8.00 per hour) = 850 hours × ($0.50 per hour) = $425 U An unfavorable variance is debited.  SH = 900 units × 1.00 hours per unit = 900 hours Labor efficiency variance = (AH - SH) × SR = (850 hours - 900 hours) × $8.00 per hour = (-50 hours) × $8.00 per hour = $400 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 3 Hard Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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|  | Compound K52E is a raw material used to make Pinkos Corporation's major product. The standard cost of compound K52E is $46.00 per ounce and the standard quantity is 5.0 ounces per unit of output. Data concerning the compound for March appear below:      The raw material was purchased on account. |

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| 34. | The debits to the Raw Materials account for March would total:      |  |  | | --- | --- | | **A.** | $170,200 |  |  |  | | --- | --- | | B. | $172,420 |  |  |  | | --- | --- | | C. | $184,000 |  |  |  | | --- | --- | | D. | $164,220 |   Raw Materials is debited for the standard cost of the raw materials purchased which is 3,700 ounces × $46.00 per ounce = $170,200 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 35. | The credits to the Raw Materials account for March would total:      |  |  | | --- | --- | | A. | $172,420 |  |  |  | | --- | --- | | B. | $184,000 |  |  |  | | --- | --- | | C. | $170,200 |  |  |  | | --- | --- | | **D.** | $164,220 |   The Raw Materials account would be credited for the standard cost of the raw materials used in production which is 3,570 ounces × $46.00 per ounce = $164,220 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 36. | The Materials Price Variance for March would be recorded as a:      |  |  | | --- | --- | | **A.** | Debit of $2,220 |  |  |  | | --- | --- | | B. | Debit of $2,142 |  |  |  | | --- | --- | | C. | Credit of $2,220 |  |  |  | | --- | --- | | D. | Credit of $2,142 |   Materials price variance = AQ × (AP - SP) = 3,700 ounces × ($46.60 per ounce - $46.00 per ounce) = 3,700 ounces × ($0.60 per ounce) = $2,220 U An unfavorable variance is debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 37. | The Materials Quantity Variance for March would be recorded as a:      |  |  | | --- | --- | | **A.** | Credit of $19,780 |  |  |  | | --- | --- | | B. | Credit of $5,980 |  |  |  | | --- | --- | | C. | Debit of $19,780 |  |  |  | | --- | --- | | D. | Debit of $5,980 |   SQ = 800 units × 5.0 ounces per unit = 4,000 ounces Materials quantity variance = (AQ - SQ) × SP = (3,570 ounces - 4,000 ounces) × $46.00 per ounce = (-430 ounces) × $46.00 per ounce = $19,780 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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|  | Florea Corporation has provided the following data concerning its most important raw material, compound K09B:      The raw material was purchased on account. |

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| 38. | The debits to the Raw Materials account for August would total:      |  |  | | --- | --- | | **A.** | $39,750 |  |  |  | | --- | --- | | B. | $15,900 |  |  |  | | --- | --- | | C. | $14,840 |  |  |  | | --- | --- | | D. | $40,050 |   Raw Materials is debited for the standard cost of the raw materials purchased which is 1,500 liters × $26.50 per liter = $39,750 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 39. | The credits to the Raw Materials account for August would total:      |  |  | | --- | --- | | A. | $40,050 |  |  |  | | --- | --- | | **B.** | $14,840 |  |  |  | | --- | --- | | C. | $39,750 |  |  |  | | --- | --- | | D. | $15,900 |   The Raw Materials account would be credited for the standard cost of the raw materials used in production which is 560 liters × $26.50 per liter = $14,840 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 40. | The Materials Price Variance for August would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $112 |  |  |  | | --- | --- | | B. | Credit of $300 |  |  |  | | --- | --- | | C. | Debit of $112 |  |  |  | | --- | --- | | **D.** | Debit of $300 |   Materials price variance = AQ × (AP - SP) = 1,500 liters × ($26.70 per liter - $26.50 per liter) = 1,500 liters × ($0.20 per liter) = $300 U An unfavorable variance is debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 41. | The Materials Quantity Variance for August would be recorded as a:      |  |  | | --- | --- | | A. | Credit of $24,910 |  |  |  | | --- | --- | | **B.** | Credit of $1,060 |  |  |  | | --- | --- | | C. | Debit of $1,060 |  |  |  | | --- | --- | | D. | Debit of $24,910 |   SQ = 100 units × 6.0 liters per unit = 600 liters Materials quantity variance = (AQ - SQ) × SP = (560 liters - 600 liters) × $26.50 per liter = (-40 liters) × $26.50 per liter = $1,060 U A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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|  | Enwall Corporation's standard wage rate is $11.20 per direct labor-hour (DLH) and according to the standards, each unit of output requires 2.9 DLHs. In December, 5,900 units were produced, the actual wage rate was $10.20 per DLH, and the actual hours were 14,150 DLHs. |

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| 42. | In the journal entry to record the incurrence of direct labor costs in December, the Work in Process entry would consist of a:      |  |  | | --- | --- | | A. | credit of $144,330. |  |  |  | | --- | --- | | **B.** | debit of $191,632. |  |  |  | | --- | --- | | C. | debit of $144,330. |  |  |  | | --- | --- | | D. | credit of $191,632. |   Work in process would be debited for the standard labor cost of the actual output which is 2.9 DLHs per unit × $11.20 per DLH × 5,900 units = $191,632 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 43. | The Labor Rate Variance for December would be recorded as a:      |  |  | | --- | --- | | A. | debit of $14,150. |  |  |  | | --- | --- | | B. | credit of $17,110. |  |  |  | | --- | --- | | C. | debit of $17,110. |  |  |  | | --- | --- | | **D.** | credit of $14,150. |   Labor rate variance = AH × (AR - SR) = 14,150 DLHs × ($10.20 per DLH - $11.20 per DLH) = 14,150 DLHs × (-$1.00 per DLH) = $14,150 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 44. | The Labor Efficiency Variance for December would be recorded as a:      |  |  | | --- | --- | | A. | debit of $33,152. |  |  |  | | --- | --- | | B. | credit of $30,192. |  |  |  | | --- | --- | | **C.** | credit of $33,152. |  |  |  | | --- | --- | | D. | debit of $30,192. |   SH = 5,900 units × 2.90 DLHs per unit = 17,110 DLHs Labor efficiency variance = (AH - SH) × SR = (14,150 DLHs - 17,110 DLHs) × $11.20 per DLH = (-2,960 DLHs) × $11.20 per DLH = $33,152 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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|  | Cafferty Corporation has provided the following data concerning its direct labor costs for March: |

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| 45. | The journal entry to record the incurrence of direct labor costs in March would include the following for Work in Process:      |  |  | | --- | --- | | A. | Credit of $33,280 |  |  |  | | --- | --- | | B. | Debit of $35,625 |  |  |  | | --- | --- | | **C.** | Debit of $33,280 |  |  |  | | --- | --- | | D. | Credit of $35,625 |   Work in process would be debited for the standard labor cost of the actual output which is 1.3 DLHs per unit × $12.80 per DLH × 2,000 units = $33,280 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 46. | The Labor Rate Variance for March would be recorded as a:      |  |  | | --- | --- | | **A.** | Credit of $855 |  |  |  | | --- | --- | | B. | Credit of $780 |  |  |  | | --- | --- | | C. | Debit of $780 |  |  |  | | --- | --- | | D. | Debit of $855 |   Labor rate variance = AH × (AR - SR) = 2,850 DLHs × ($12.50 per DLH - $12.80 per DLH) = 2,850 DLHs × (($0.30) per DLH) = $855 F A favorable variance is credited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 47. | The Labor Efficiency Variance for March would be recorded as a:      |  |  | | --- | --- | | **A.** | Debit of $3,200 |  |  |  | | --- | --- | | B. | Credit of $3,125 |  |  |  | | --- | --- | | C. | Credit of $3,200 |  |  |  | | --- | --- | | D. | Debit of $3,125 |   SH = 2,000 units × 1.30 DLHs per unit = 2,600 DLHs Labor efficiency variance = (AH - SH) × SR = (2,850 DLHs - 2,600 DLHs) × $12.80 per DLH = (250 DLHs) × $12.80 per DLH = $3,200 U An unfavorable variance is debited. |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

**Essay Questions**

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| 48. | Albert Manufacturing Company manufactures a single product. The standard cost of one unit of this product is:      During the month of October, 6,000 units were produced. Selected cost data relating to the month's production follow:      There was no beginning inventory of raw materials. The variable overhead rate is based on direct labor-hours.  **Required:**  a. For direct materials, compute the price and quantity variances for the month, and prepare journal entries to record activity for the month. b. For direct labor, compute the rate and efficiency variances for the month, and prepare a journal entry to record labor activity for the month. c. For variable overhead, compute the rate variance for the month.     a. Materials price variance = (AQ × AP) - (AQ × SP) = $85,800 - (60,000 feet × $1.50 per foot) = $85,800 - ($90,000) = $4,200 F  Materials quantity variance = (AQ - SQ) × SP = [38,000 feet - (6,000 units × 6 feet per unit)] × $1.50 per foot = [38,000 feet - 36,000 feet] × $1.50 per foot = [2,000 feet] × $1.50 per foot = $3,000 U      b. The actual hours worked during the period can be computed using the variable overhead efficiency variance, as follows:  Variable overhead efficiency variance = (AH - SH) × SR $2,250 U = [AH - (6,000 units × 1 hour per unit)] × $4.50 per hour $2,250 = [AH - (6,000 units × 1 hour per unit)] × $4.50 per hour AH - (6,000 units × 1 hour per unit) = $2,250 ÷ $4.50 per hour AH - 6,000 hours = 500 hours AH = 6,500 hours  Labor rate variance = (AH × AR) - (AH × SR) = $41,925 - (6,500 hours × $6.75 per hour) = $41,925 - $43,875 = $1,950 F  Labor efficiency variance = (AH - SH) × SR = (6,500 hours - 6,000 hours) × $6.75 per hour = 500 hours × $6.75 per hour = $3,375 U      c. Variable overhead rate variance = (AH × AR) - (AH × SR) = $30,713 - (6,500 hours × $4.50 per hour) = $30,713 - $29,250 = $1,463 U |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 3 Hard Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10-03 Compute the variable manufacturing overhead rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 49. | Ungvarsky Corporation has provided the following data concerning its most important raw material, compound J38F:      The raw material was purchased on account.  **Required:**  a. Record the purchase of the raw material in a journal entry. b. Record the use of the raw material in production in a journal entry.     a. Materials price variance = AQ × (AP - SP) = 1,900 liters × ($29.30 per liter - $28.80 per liter) = 1,900 liters × ($0.50 per liter) = $950 U      b. Materials quantity variance = (AQ - SQ) × SP = [1,220 liters - (4.9 liters per unit × 300 units)] × $28.80 per liter = [1,220 liters - 1,470 liters] × $28.80 per liter = [-250 liters] × $28.80 per liter = $7,200 F  Entry to record use of materials: Standard quantity allowed for the actual output (300 units at 4.9 liters per unit) = 1,470 |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 50. | The standards for product F28 call for 2.7 pounds of a raw material that costs $16.50 per pound. Last month, 4,100 pounds of the raw material were purchased for $70,520. The actual output of the month was 1,300 units of product F28. A total of 3,500 pounds of the raw material were used to produce this output.  **Required:**  a. What is the materials price variance for the month? b. What is the materials quantity variance for the month? c. Prepare journal entries to record the purchase and use of the raw material during the month. (All raw materials are purchased on account.)     a. Materials price variance = (AQ × AP) - (AQ × SP) = $70,520 - (4,100 pounds × $16.50 per pound) = $70,520 - $67,650 = $2,870 U  b. Materials quantity variance = (AQ - SQ) × SP = (3,500 pounds - 3,510 pounds) × $16.50 per pound = (-10 pounds) × $16.50 per pound = $165 F \*SQ = Standard quantity per unit × Actual output = 2.7 pounds per unit × 1,300 units = 3,510 pounds  c. Journal entries to record the purchase and use of the raw material: Record the purchase of the raw material:      Record the use of the raw material: |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 51. | The following standards have been established for a raw material used in the production of product G13:      The following data pertain to a recent month's operations:      **Required:**  a. What is the materials price variance for the month? b. What is the materials quantity variance for the month? c. Prepare journal entries to record the purchase and use of the raw material during the month. (All raw materials are purchased on account.)     a. Materials price variance = (AQ × AP) - (AQ × SP) = $100,725 - (5,100 liters × $19.00 per liter) = $100,725 - $96,900 = $3,825 U  b. Materials quantity variance = (AQ - SQ) × SP = (4,700 liters - 4,692 liters\*) × $19.00 per liter = (8 liters) × $19.00 per liter = $152 U \*SQ = Standard quantity per unit × Actual output = 2.3 liters per unit × 2,040 units = 4,692 liters  c. Journal entries to record the purchase and use of the raw material: Record the purchase of the raw material:      Record the use of the raw material: |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 2 Medium Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 52. | Compound C65Z is used by Sinkey Corporation to make one of its products. The standard cost of compound C65Z is $21.10 per ounce and the standard quantity is 2.0 ounces per unit of output. Data concerning the compound in the most recent month appear below:      The raw material was purchased on account.  **Required:**  a. Record the purchase of the raw material in a journal entry. b. Record the use of the raw material in production in a journal entry.     a. Materials price variance = AQ × (AP - SP) = 1,000 ounces × ($20.10 per ounce - $21.10 per ounce) = 1,000 ounces × (-$1.00 per ounce) = $1,000 F  Entry to record purchase of materials:      b. Materials quantity variance = (AQ - SQ) × SP = [380 ounces - (2.0 ounces per unit × 200 units)] × $21.10 per ounce = [380 ounces - 400 ounces] × $21.10 per ounce = [-20 ounces] × $21.10 per ounce = $422 F  Entry to record use of materials: |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-01 Compute the direct materials price and quantity variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 53. | Pinkney Corporation has provided the following data concerning its direct labor costs for November:      **Required:**  Prepare the journal entry to record the incurrence of direct labor costs.     Labor rate variance = AH × (AR - SR) = 39,720 DLHs × ($11.20 per DLH - $12.20 per DLH) = 39,720 DLHs × (-$1.00 per DLH) = $39,720 F  SH = 7,900 units × 5.3 DLHs per unit = 41,870 DLHs Labor efficiency variance = (AH - SH) × SR = [39,720 DLHs - 41,870 DLHs] × $12.20 per DLH = [-2,150 DLHs] × $12.20 per DLH = $26,320 F |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 54. | The direct labor standards at Hebden Corporation are $10.30 per direct labor-hour (DLH) and 3.4 DLHs per unit of output. In December, 7,800 units were produced, the actual wage rate was $9.90 per DLH, and the actual hours were 21,340 DLHs.  **Required:**  Prepare the journal entry to record the incurrence of direct labor costs.     Labor rate variance = AH × (AR - SR) = 21,340 DLHs × ($9.90 per DLH - $10.30 per DLH) = 21,340 DLHs × (-$0.40 per DLH) = $8,536 F  SH = 7,800 units × 3.4 DLHs per unit = 26,520 DLHs Labor efficiency variance = (AH - SH) × SR = [21,340 DLHs - 26,520 DLHs] × $10.30 per DLH = [-5,180 DLHs] × $10.30 per DLH = $53,354 F |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 55. | The standards for product Q58W specify 8.4 direct labor-hours per unit at $14.00 per direct labor-hour. Last month 400 units of product Q58W were produced using 2,800 direct labor-hours at a total direct labor wage cost of $41,020.  **Required:**  a. What was the labor rate variance for the month? b. What was the labor efficiency variance for the month? c. Prepare a journal entry to record direct labor costs during the month, including the direct labor variances.     a. Labor rate variance = (AH × AR) - (AH × SR) = $41,020 - (2,800 direct labor-hours × $14.00 per direct labor-hour) = $41,020 - $39,200 = $1,820 U  b. Labor efficiency variance = (AH - SH\*) × SR = (2,800 direct labor-hours - 3,360 direct labor-hours) × $14.00 per direct labor-hour = -560 direct labor-hours × $14.00 per direct labor-hour = $7,840 F  \*SH = Standard hours per unit × Actual output = 8.4 direct labor-hours per unit × 400 units = 3,360 direct labor-hours  c. Journal entry to record the direct labor costs: |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |

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| 56. | The following direct labor standards have been established for product N30A:      The following data pertain to the most recent month's operations during which 400 units of product N30A were made:      **Required:**  a. What was the labor rate variance for the month? b. What was the labor efficiency variance for the month? c. Prepare a journal entry to record direct labor costs during the month, including the direct labor variances.     a. Labor rate variance = (AH × AR) - (AH × SR) = $11,385 - (1,100 hours × $10.50 per hour) = $11,385 - $11,550 = $165 F  b. Labor efficiency variance = (AH - SH\*) × SR = (1,100 hours- 1,320 hours\*) × $10.50 per hour = -220 hours × $10.50 per hour = $2,310 F \*SH = Standard hours per unit × Actual output = 3.3 hours per unit × 400 units = 1,320 hours  c. Journal entry to record the direct labor costs: |

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| *AACSB: Analytic AICPA BB: Critical Thinking AICPA FN: Measurement Blooms: Apply Difficulty: 1 Easy Learning Objective: 10-02 Compute the direct labor rate and efficiency variances and explain their significance. Learning Objective: 10B-05 Prepare journal entries to record standard costs and variances.* |