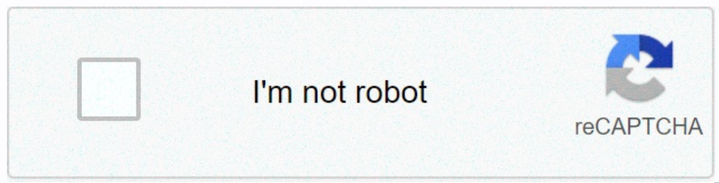

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Tidd corporation makes a product with the following standard costs

1. Chapter 10 Standard Costs and Dispersions Answer to Key True/False Questions 1. The variance of prices for materials is calculated by multiplying the difference between the actual price and the standard price for the actual number of materials used in the production. FALSE AACSB: Bloom's Reflective Thinking: Knowledge 2. In general, the purchaser is responsible for the variance of prices for materials. THE TRUTH OF THE AACSB: Bloom's Reflective Thinking: Knowledge 3. The variance of prices for materials is favorable if the actual price exceeds the standard price. FALSE AACSB: Bloom's Reflective Thinking: Knowledge 10-64 2 4. Generally speaking, it is the responsibility of the production department to see that the use of the material is kept in line with standards. TRUE AACSB: Bloom's Reflective Thinking: Knowledge 5. When it takes more hours of labor time to complete a job than the standard allows, the variance of the labor rate is unfavorable. FALSE AACSB: Bloom's Reflective Thinking: Understanding the Learning Goal: Calculate direct labor efficiency and speed variance and explain their 6 values. Standard costs should generally be based on the actual costs of previous periods. FALSE AACSB: Bloom's Reflective Thinking: Knowledge 7. The standard quantity per unit for direct materials should not include an allowance for waste. FALSE AACSB: Bloom's Reflective Thinking: Knowledge 10-65 3 8. Ideal standards should be used for forecasting and planning. FALSE AACSB: Bloom's Rebar Thinking: Understanding 9. The standard unit cost is calculated by multiplying the standard number or hours by the standard price or bid. THE TRUTH OF THE AACSB: Bloom's Reflective Thinking: Knowledge 10. Standard costs significantly increase the complexity of the accounting process. FALSE AACSB: Bloom's Reflective Thinking: Multiple Knowledge Choice Questions 10-66 4 11. When calculating standard dispersion costs, the difference between actual and standard price multiplied by actual quantity gives a(n): A. combined price and quantity variance. B. performance variance. C. price variance. D. variance amounts. Material Price Variance = AQ (AP - SP) AACSB: Bloom's Reflective Thinking: The Purpose of Knowledge Training: Calculate Direct Labor Efficiency and Speed Variance and Explain Their Meaning Source: CMA, Adapted 12. The total model for calculating price variance: A. actual number of inputs (actual price - standard price). B. Standard price (actual input count is the standard quantity allowed for output). C. (actual number of inputs at the actual price) - (the standard quantity allowed for release at the standard price). D. Actual price (actual number of inputs is the standard quantity allowed for output). Material Price Variance = AQ (AP - SP) AACSB: Bloom's Reflective Thinking: Understanding Learning Goal: Calculate Direct Labor Efficiency and Speed Variance explain their value 10-67 5 13. Procurement Procurement Clampett ordered lower quality materials in an attempt to save on price and in response to the production manager's demands due to an error in production planning. The materials were sent by aircraft at speeds higher than normally charged for shipment by truck, leading to an adverse variance in material prices. The lower quality of the material proved unsuitable on the production line and led to excessive waste. In this situation, who should be responsible for the price of materials and the variance of quantity? A. Option A B. Option B C. Option C D. Option D Variance of material price is the responsibility of the production manager, since the adverse variance was due to the requirements made by the production manager. The variance of the amount of materials is the responsibility of the purchasing agent, since the purchasing agent was responsible for ordering lower quality material. AACSB: Bloom's Reflective Thinking: Understanding 10-68 6 14. Todco planned to make 3,000 units of its only product, Teragram, during November. Standard specs for a single teragram unit include six pounds of material at $0.30 per pound. Actual production in November is 3,100 teragram units. The accountant calculated a favorable variance of purchasing materials of $380 and an unfavorable variance of the amount of materials in the amount of $120. Based on these variances, we can conclude that: A. more materials were purchased than was used. B. More materials were used than were purchased. C. The actual cost of the materials was less than the standard cost. D. Actual use of materials was less than the standard allowed. Variance of prices for materials = AQ (AP - SP) Favorable variance of prices for materials can occur only if the actual price of materials was less than the standard price. AACSB: Bloom's Reflective Thinking: Understanding Source: CMA, adapted 15. Variance of the number of materials should be calculated: A. when purchasing materials. B. based on the number of materials used in production. C. based on the difference between actual and standard prices per unit times the actual number is used. D. only when there is a difference between the standard and actual cost per unit of materials. Variance on the amount of materials = (AQ - SQ)SP, where AQ is the actual amount used by AACSB: Bloom's Reflective Thinking: Understanding 10-69 7 16. Which department should normally be responsible for the adverse variance of materials prices? A. Production. B. Processing of materials. C. Engineering. D. Purchase. The procurement department should usually be responsible for adverse variance in materials prices, as this department usually has the greatest price controls. AACSB: Bloom's Reflective Thinking: Knowledge 17. Tower planned to make 3,000 units of its Titactium product during November. Standards for Titactium unit specify six pounds of materials at $0.30 per pound. Actual production in November is 3100 units of titact. There was an adverse variance in materials prices of $380 and a favorable variance in the amount of materials at $120. Based on these variances, we can conclude that: A. more materials were purchased than was used. B. More materials were used than were purchased. C. The actual value of the pound for materials was less than the standard value of the pound. D. Actual use of materials was less than the standard allowed. Variance of the amount of materials = (AQ - SQ) JV Favorable variance of the amount of materials occurs only if the actual use of materials was less than the allowed standard, that is, if AQ < SQ. AACSB: Bloom's Reflexive Thinking: Understanding Source: CMA, adapted 10-70 8 18. If the labor efficiency variance is unfavorable, the A. actual hours exceeded the standard hours allowed for actual output.B. the standard hours allowed for actual release exceeded actual hours.C. the standard norm exceeded the actual norm >. Variance of labor efficiency as a result of the use of poor quality materials should be charged with: A. production manager. B. procurement agent. C. overhead production. D. Industrial Engineering Department. The purchasing manager is usually responsible for purchasing substandard materials. AACSB: Bloom's Reflective Thinking: Understanding Learning Goal: Calculate direct labor efficiency and speed variances and explain their value to 10-71 9 20. Adverse direct variance of labor efficiency can be caused by: A. adverse variance of the amount of materials. B. Adverse variable consignment rate. C. favorable variance of the amount of materials. D. favorable variable variance overhead. Adverse variance of quantity can be caused by poor quality materials, which, in turn, can lead to adverse dispersion of labor efficiency. AACSB: Bloom's Reflective Thinking: Understanding Learning Purpose: Calculate direct labor efficiency and speed variance and explain their meaning Source: CMA, adapted 21. Variable production overheads are made on products based on standard direct labor hours. If the direct variance of labor efficiency is unfavorable, the variable overhead of efficiency will be: A. favorable. B. unfavorable. C. favorable or unfavorable. D. zero. Labour efficiency variance = (AH - SH) Variable overhead efficiency variance = (AH - SH) SR If performance variances are unfavorable, > SH. If > SH, variable overhead efficiency variance should be be unfavorable. AACSB: Bloom's Reflective Thinking: Knowledge Source: CMA, adapted 10-72 10 22. Which of the following statements about ideal standards is incorrect? A. Ideal standards generally do not provide the best motivation for workers. B. Ideal standards do not make allowances for waste, damage and machine breakage. C. Ideal standards are better suited for cash budgeting than practical standards. D. Ideal standards can be better than practical standards when managers seek continuous improvement. Practical standards provide better cash flow forecasts for cash budgeting than practical standards. AACSB: Bloom's Reflective Thinking: Understanding Source: CMA, adapted 23. Porter has a standard cost system. In July, the company purchased and used 22,500 pounds of direct material at an actual cost of $53,000; the number of materials was $1875 Unfavorably; and the standard amount of materials allowed for July production is £21,750. The variance in materials prices for July was: A. $2,725 F B. $2,725 U C. $3,250 F D. $3,250 U Materials price variance = (AQ AP) - (AQ SP) = $53,000 - (22,500 pounds $2.50 per pound) = $53,000 - $56,250 = $3,250 F Level: Hard 10-73 11 24. Last month, £75,000 of direct material was purchased and £71,000 was used. If the actual purchase price per pound was $0.50 more than the standard purchase price per pound, the variance in the price of materials was: A. $2,000 F B. $37,500 F C. $37,500 U D. $35,500 U Materials price variance = (AQ AP) - (AQ SP) = AQ (AP - SP) = 75,000 pounds $0.50 per pound = $37,500 U 25. The following standards of materials are set for a particular product: The following product transactions for the last month: What is the variance in the amount of materials per month? A. $19,460 F B. $9,730 U C. $10,115 U D. $20,230 F SQ = 7.3 pounds per unit 1.0 units = 7,300 pounds Materials number variance = (AQ - SQ) SP = (5,900 pounds - 7,300 pounds) $14.45 per pound = (-1,400 pounds) $14.45 per pound = $20,230 F 10-74 12 26. The following standards of materials are set for a particular product: The following product transactions for the last month: What is the variance in material prices for the month? A. $15,405 F B. $5,775 U C. $5925 U D. $1600 U AQ AP = $63,200 Materials Price Var AQ (AP - SP) = AQ AP - AQ SP Price Variance = $63,200 - (3,200 feet $19.25 per foot) = $63,200 - $61,600 = $1,600 U 10-75 13 27. Wright has a standard cost system. The following data is available for September: Actual price per pound of direct materials purchased in September: A. $1.85 B. $2.00 C. $2.10 D. $2.15 Variance of materials prices = AQ (AP - SP) 25,000 pounds (AP - $2 per pound) = $2,500 U 25,000 pounds AP - $50,000 = $2,500 U 25,000 pounds AP - $50,000 = $2,500 pounds AP = $52,500 AP = $52,500 25,000 pounds AP = $2.10 per pound Level: Hard 10-76 14 28. Cox uses the standard cost. The following data are available for April: Standard amount of material allowed for April production: A. 14,200 gallons B. 12,700 gallons C. 11,700 gallons D. 10,200 gallons Number of dispersion materials = (AQ - SQ) SP (12200 gallons - SQ) $4 per gallon = $4 per gallon2000 U ($48,800 - SQ) $4 per gallon = $2,000 U SQ$4 per gallon = $46,800 SQ=$46,800 $4 per gallon SQ=11,700 gallon level : Hard 10-77 15 29. The standard product cost card shows that the product must use 4 kilograms of material B per finished unit and that the standard price of material B is $4.50 per kilogram. During April, when the budget level of production is 1000 units, actually 1040 units were produced. A total of 4,100 kilograms of B material were used in production, and the stockpiles of material B were reduced by 300 kilograms during April. The total cost of Material B purchased during April was $14,400. Material variances for material B during April were: A. Option A B. Option B C. Option C D. Option D Start balance of raw materials + Raw materials purchases = Materials used in production + Final balance of raw materials Purchases of raw materials = Materials used in production + Final balance of raw materials - Beginning of raw material balance Purchases of raw materials = Materials used in production + (Final balance of raw materials - Initial balance of raw materials) = 4100 kilograms + (-300 kilograms) = 3.800 kilograms. kilograms Price of variance materials = AQ (AP - SP) =$14,400 - (3800 kilograms $4.50 per kilogram) =$14,400 - $17,100 = $2,700 F Number of dispersion materials = (AQ - SQ) SP = AQ SP = AQ SP SQ- SP = $18,450 - (1,040 units 4 kilograms per unit) $4.50 per kilogram = $18,450 - $18,720 = $270 F Level: Hard Source: CMA, adapted 10-78 16 30. The following labor standards are set for a particular product: The following data relate to product transactions for the last month: What is the variance in labor efficiency for the month? A. $13,805 U B. $13,530 U C. $15,305 U D. $15,305 F SH = 1,500 units 4 hours per unit = 6,000 hours Of Labor Efficiency Variance = (AH - SH) SR= (7,100 hours - 6,000 hours) $1,000 12.30 per hour = (1,100 hours) $12.30 an hour = $13,530 U Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 10-79 17 31. The following labor standards have been set for a particular product: The following data relate to product transactions over the past month: What is the labor rate variance for the month? A. $1,325 U B. $1,780 F C. $430 F D. $430 U AH AR = $94,340 Labor Rate Variance = AH (AR - SR) = AH - AH SR = $94,340 - (5300 hours $17.55 per hour) = $1,325 U Training Goal: Calculate Direct Labor Efficiency and Speed and explain their value 10-80 18 32. Direct labor standards for the product are 2.5 hours at $8 an hour. Last month, 9,000 units of the product were produced, and the productivity variance was $8,000 F. The actual number of hours worked in the past period is: A. 23,500 B. 22,500 C. 20500 D. 21500 SH = 9000 units 2.5 hours per unit = 22.50 0 hours Labor Efficiency Variance = (AH - SH) SR = (AH - 22,500 hours) $8 per hour = -$8,000 AH$8 per hour - $1,800,000 = -$8,000 AH $8 per hour = $172,000 AH = $172,000 $8 per hour AH = 21,500 hours : Calculate the direct efficiency of work and speed variances and explain their value Level: Hard 10-81 19 33. Reedy uses a standard cost system. The following data is available for November: The actual direct labor rate for November is: A. $8.80 B. $8.90 C. $9.00 D. $9.20 Labor rate variance = AH(AR - SR) 5800 hours (AR - $9 per hour) = -$1,160 5,800 hours AR - $52,200 = -$1,160 5,800 hours AR = $51,000 AR = $51,040 5,800 hours AR = $8.80 per hour Learning goal: Calculate direct labor efficiency and speed variances and explain their significance Level : Hard 10-82 20 34. Borden Enterprises uses the standard cost. For April, the company reported the following data: Standard Direct Labor Rate: $10 an hour Standard hours allowed for actual production: 8,000 hours Actual direct labor rate: $9.50 per hour Labor efficiency variance: $4,800 Favorable Labor Rate Variance for April is: A. $3,760 U B. $3,760 F. $2,850 F D. $2,850 U Labor Efficiency Variance = (AH - SH) SR= (AH - 8,000 hours) $10 per hour = -$4,800 AH $10 per hour - $80,000 = -$4,800 AH $10 per hour = $75200 AH = $75,200 $10 an hour AH = 7520 dispersion labor rates = AH (AR - SR) = 7520 hours ($9.50 per hour - $10.00 per hour) = 7,520 hours (-hours $0.50 an hour) = $3,760 F Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value Level: Hard 10-83 21 35. Furson Corporation produces a single product. Over the past period, 6,500 units have been produced and there has been an adverse variance in labor efficiency of $26,000. Direct workers were paid $8 an hour and the total wage was $182,000. Labour's rate variance was zero. Standard working hours per unit of products closest to: A. 3.0 B. 3.5 C. 4.0 D. 4.5 AH = $182,000 $8 per hour = 22,75 0 hours of labor dispersion = AH (AR - SR) $0 = 22,750 hours ($8 per hour - SR) SR = $8 per hour Labor Efficiency Variance = (AH - SH) SR $26,000 = (22,750 hours - 6,500 units Standard hours per unit) $8 per hour (22,750 hours - 6,500 units Standard hours per unit) = $26,000 $8 per hour (22,750 hours - 6,500 units Standard hours per unit) = 32,500 hours 6500 units Standard hours per unit = 19,500 hours hours per unit = 19,500 hours 6,500 units Standard hours per unit = 3 hours per unit Learning goal: goal: direct performance and speed variances and explain their meaning Level: Hard Source: CMA, adapted 10-84 22 36. For a company that manufactures only one product, the following variable production overhead standards are set: The following data relate to operations for the past month: What is the variable overhead performance variance for the month? A. $9,219 U B. $10,179 U C. $9867 U D. $648 U SH = 600 units 2.7 hours per unit = 1.7 hours per unit 620 hours Variable consignment rate variance = (AH - SH) SR = (2400 hours - 1620 hours) $13.05 per hour = (780 hours) $13.05 per hour = $10,179 U 10-85 23 37. For a company that manufactures only one product, the following variable production overhead standards are set: The following data relate to operations over the past month: What is the variable overhead rate variance per month? A. $1,200 F B. $9,625 F C. $8,425 F D. $990 U Variable overhead rate variance = AH (AR - SR) = AH AR - AH SR = $45,375 - (3300 hours $13.45 per hour) = $45,375 - $44,385 = $990 U 10-86 24 38. Millonzi Corporation has a standard cost system in which it applies overhead production to products based on standard machine-hours (MS). The company provided the following data for the last month: What was the variance of variable invoice rates for the month? A. $4,350 favorable B. $2,000 unfavorable C. $2,650 favorable D. $1,700 favorable variable overhead rates variance = AH (AR - SR) = AH AR - AH SR = $42,400 - (5,300 hours $8.50 per hour) = $42,400-$45,050 = $2,650 F Level: Hard 10-87 25 39. Lafountaine Manufacturing Corporation has a standard cost system in which it applies production overheads to products based on standard machine-hours (MHs). The company's value formula for variable overhead production is $4.70 per MH. During the month, the actual total overhead for the production of variables was $20,210, and the actual level of activity during this period was 4700 METRES. What was the variance of the variable overhead rate for the month? A. $400 unfavorable B. $1,880 favorable C. $1,880 unfavorable D. $400 favorable variable consignment rate = AH (AR - SR) = AH AR - AH SR = $20,210 - (4700 hours $4.70 per hour) = $20,210 - $22,090 = $1880 F 10-88 26 40. Dowen Corporation applies production overheads to products based on standard machine-hours. Over the past month, the company bases its budget on 4400 engineering. Budget and actual overheads for the month appear below: the company actually operated 4,460 machine-hours during the month. The standard hours allowed for actual release were 4,310 machine-hours during the month. What was the

overall shortness of overhead efficiency for the month? A. $2,198 favorable B. $1,695 unfavorable C. $150 unfavorable D. $503 favorable variable overhead = $21,560 + $28,160 = $49,720 SR = $49,720,440 hours = $11.30 per hour Variable consignment rate effectiveness = (AH - SH) SR= (4460 hours - 4310 hours) $11.30 per hour = (150 hours) $11.30 per hour = $1,695 U Level: Hard 10-89 27 41. Ruston Corporation applies production overheads to products based on standard machine-hours. Budget and actual overheads for the past month appear lower: the initial budget was based on 4,500 machine-hours. The company actually operated 4,590 machine-hours during the month, and the standard hours allowed for actual release worked 4,700 hours of machines. What was the overall shortness of overhead efficiency for the month? A. $50 unfavorable B. $869 favorable C. $969 Unfavorable D. $100 Unfavorable SR = $35,550 4500 hours = $7.90 per hour Variable air efficiency variance = (AH - SH) SR = (4590 hours - 4,700 hours) $7.90 per hour = (-110 hours) $7.90 per hour = $869 F Level: Hard 10-90 28 42. Tavorn Corporation applies production overhead to products based on standard hours machines. The company's standard variable production invoice rate is $1.80 per machine-hour. The actual variable cost of overhead production for the month was $13,080. The initial budget for the month was based on 7,100 machine-hours. The company actually operated 7,210 hours of machines during the month. The standard hours allowed for the actual release of the month reached 7,070 hours. What was the changing variance of overhead efficiency for the month? A. $354 unfavorable B. $252 adverse C. $54 favorable D. $102 adverse variable overhead efficiency variance = (AH - SH) SR = (7210 hours - 7,070 hours) $1.80 per hour = (140 hours) $1.80 per hour = $252 U 10-91 29 43 Kornfeld Corporation produces metal telephone poles. Over the past month, the company has declared production of 2,800 poles. The actual production is 3200 poles. By standards, each pole requires 2.2 cars-hours. The actual hours of the month's machines were blaring 6,890 hours. The standard variable production invoice rate is $9.20 per machine-hour. The actual variable cost of production for the month was $67,020. The dispersion of overhead performance is: A. $1,380 U B. $1,380 F C. $2,252 F D. $2,252 U SH = 3,200 poles 2.2 hours per pole = 7,04 0 hours Variable overhead efficiency variance = (AH - SH) SR = (6890 hours - 7040 hours) $9.20 per hour = (-150 hours) $9.20 per hour = $1,380 F 10-92 30 44. Acri Corporation produces large commercial doors for warehouses and other facilities. Over the past month, the company has declared production of 6,900 doors. The actual production was bly 7,300 doors. By standards, each door requires 5.6 hours of machinery. The actual hours of the month's machines were blaring 40,360 hours. The standard cost of deliveries, as well as an element of variable overhead production, is $4.20 per machine-hour. The actual cost of deliveries for the month was 168251. Variable Variable efficiency variances for the cost of deliveries is: A. $3,445 U B. $2,184 F C. $2,184 U D. $3.445 F SH = 7,300 doors 5.6 hours for doors = 40.8 Hours Variable Overhead Efficiency Variance = (AH - SH) SR= (40,360 hours - 40,880 hours) $4.20 per hour = (-520 hours) $4.20 an hour = $2,184 F 10-93 31 45. The following data was provided by Spraglin Corporation, the company that manufactures truck loaders: The cost of deliveries is an element of variable overhead production. Variable overhead dispersing the cost effectiveness of consumables is: A. $484 U B. $2,643 U C. $484 F D. $2,643 F SH = 6,200 trucks 3.7 hours per truck = 229,440 Hours of Change overhead efficiency variance = (AH - SH) SR= (23,160 hours - 22,940 hours) $2.20 per hour = (220 hours) $2.20 an hour = $484 U Litton Company set standards as follows: Direct Material : 3 pounds for $4 per pound = $12 per unit Direct Labor : 2 hours for $8 per hour = $16 per unit Variable overhead production: 2 hours for $5 an hour = $10 per unit Actual production figures for the past year are listed below. The company records the variance of prices for materials when purchasing materials. The Company applies variable production overheads for products based on standard direct labor hours 32 46. The variance of the price of materials is: A. $400 U B. $400 F C. $600 F D. $600 U Materials price variance = (AQ AP) - (AQ SP) $11,400 - (3,000 pounds $4 per pound) $11,400 - $12,000 = $600 F 47. The variance in the amount of materials is: A. $800 U B. $4,000 U C. $760 U D. $760 F SQ = 3 pounds per unit 600 units = 1,800 pounds Number of dispersion materials = (AQ - SQ) SP = (2,000 pounds - 1,800 pounds) $4 per pound = (200 pounds) $4 per pound = $800 U 10-95 33 48. The dispersion of labor rates is: A. $480 F B. $480 U C. $440 F D. $440 U labor rate variance = AH (AR - SR) = AH AR - AH SR = $9,240 - (1100 hours $8 per hour) = $9,240 - $8,800 = $440 U Training goal: Calculate direct labor efficiency and speed dispersions and explain their value 49. The variance in labor efficiency is: A. $800 F B. $800 U C. $840 F D. $840 U SH = 600 units for 2 hours per unit = 1200 hours Labor Efficiency Variance = (AH - SH) SR = (1100 hours - 1200 hours) $8 per hour = (-100 hours) $8 per hour = $800 F Learning goal: Calculate direct labor efficiency and dispersion rate and explain their value to 10-96 34 50. The variance of variable overhead speed is: A. $240 U B. $220 U C. $220 F D. $240 F Variable overhead variance rate = (AH AR) - (AH SR) = $5,720 - (1100 hours $5.00 per hour) = $5,720 - $5,500 = $220 U 51 The dispersion of overhead performance is: A. $520 F B. $520 U C. $500 U D. $500 F Variable air efficiency variance = (AH - SH) SR = (1100 hours - 1200 hours) $5.00 per hour = (-100 hours) $5.00 per hour = $500 F 10-97 35 Coxing performs cement tests in his laboratory. The following standards have been set for The main test was performed: During March, the laboratory conducted 2,000 major tests. March 1 direct materials (sand) was not at hand. Variable production overheads are assigned to the main test based on standard direct labor hours. During March, the following events occurred: 8,600 pounds of sand was purchased worth $7,310. 7,200 pounds of sand were used for the main tests. 840 actual direct labor hours were worked out at a cost of $8,610. The actual variable in production overhead was $3, the variance in materials price for March is: A. $860 unfavorable B. $860 favorable C. $281 Unfavorable D. $281 favorable Material price variance = AQ (AP - SP) = AQ AP - AQ SP = $7310 - (8600 pounds $0.75 per pound) = $7,310 - $6.450 = $860 U 10-98 36 53. The variance in the amount of materials for March is: A. $900 favorable B. $1,950 favorable C. $1,950 unfavorable D. $900 Unfavorable SQ = 3 pounds per unit 2,000 units = 6,000 pounds Materials amount variance = (AQ - SQ) SP= (7,200 pounds - 6,000 pounds) $0.75 per pound = (1,200 pounds) $0.75 per pound = $900 U 54. Labor's variance rate for March is: A. $4,578 unfavorable B. $1,470 unfavorable C. $4,578 favorable D. $1,470 favorable labor rate variance = AH (AR - SR) = AH AR - AH SR = $1 8610 - (() 840 hours $12 an hour) = $8,610-$10,080 = $1,470 F Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 10-99 37 55. The labor efficiency variance for March is: A. $480 favorable B. $480 unfavorable C. $192 favorable D. $192 unfavorable SH = 2000 tests 0.4 hours per test = 800 hours Labor Efficiency Variance = (AH - SH) SR= (840 hours) $12 an hour = (40 hours) $12 an hour = $480 U Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 56. The variance on the effectiveness of variable overheads for March is: A. $320 unfavorable B. $320 favorable C. $360 unfavorable D. $360 favorable SH = 2000 tests 0.4 hours per test = 800 hours Variable air Performance variance = (AH - SH) SR= (840 hours) $9 per hour = (40 hours) $9 per hour = $360 U 38 Hurren Corporation makes the product with the following standard costs: The Company reported the following results regarding this product in June. The company applies variable overheads based on direct labor hours. Variance of purchases of direct materials is calculated when buying materials. 57. The variance in the amount of materials for June is: A. $1,760 U B. $1,782 F C. $1760 F D. $1,782 U SQ = 6,500 units 4.4 gram per unit = 2860 0 grams of materials variance amount = (AQ - SQ) SP = (28,380 grams - 28,600 grams) $8.00 per gram = (-220 grams) $8.00 per gram = $1,760 F 39,58. The price variance for June is: A. $3,180 U B. $2,860 F C. $2,860 U D. $3,180 F Material Price Variance = AQ (AP SP) = 31800 grams ($8.10 per gram - $8.00 per gram) = 31800 31800 ($0.10 per gram) = $3,180 U 59. The labor efficiency variance for June is: A. $995 U B. $950 U C. $995 F D. $950 F SH = 6,500 units 0.7 hours per unit = 4.0 unit 550 hours Labor Efficiency Variance = (AH - SH) SR = (4500 hours - 4,550 hours) $19 per hour = (-50 hours) $19 an hour = $950 F Learning Goal: Calculate direct labor efficiency and speed deviation and explain their value to 40 60. Labor's variance rate for June is: A. $4,095 F B. $4,050 F C. $4,095 U D. $4,050 U Labor rates variance = AH(AR - SR) = 4,500 hours (4,500 hours) $1 19.90 per hour - $19.00 an hour) = 4,500 hours ($0.90 per hour) = $4,050 U Learning Goal: Calculate direct labor efficiency and speed variances and explain their 61 values. Variable overhead efficiency variance for June is: A. $185 F B. $200 U C. $185 U D. $200 F SH = 6,500 units 0.7 hours per unit = 4,550 hours Variable air efficiency variance = (AH - SH) SR= (4,500 hours - 4,550 hours) $4 per hour = $50 hours) $4 per hour = $200 F 41 62. The variance of the variable overhead rate for June is: A. $1,365 U B. $1,365 F C. $1,350 F D. $1350 U Variable consignment rate = AH(AR - SR) = 4500 hours ($4,500 hours 1 3.70 per hour - $4.00 per hour) = 4,500 hours (-$0.30 per hour) = $1,350 F Snuggs Corporation makes the product with the following standard costs: The Company reported the following results regarding this product in October. The company applies variable overheads based on direct labor hours. Dispersion of purchases of direct materials is calculated when purchasing materials 42 63. The variance in the amount of materials for October is: A. $1,798 U B. $1,798 F C. $1740 F D. $1740 U SQ = 2.8 ounces per unit 1100 units = 3 Units80 ounces Materials number variance = (AQ - SQ) SP = (2790 ounces - 3080 ounces) $6.00 per ounce = (-290 ounces) $6.00 per ounce = $1,740 F 64. The variance in the price of materials for October is: A. $620 F B. $616 F C. $616 U D. $620 U Materials price variance = AQ (AP - SP) = 3,100 ounces ($6.20 per ounce - $6.00 per ounce) = 3,100 ounces ($0.20 per ounce) = $620 U 43,65. The dispersion of labor efficiency for October is: A. $510 U B. $480 F C. $480 U D. $510 F SH = 1100 units 0.3 hours per unit = 33 Hours Of Labor Efficiency Variance = (AH - SH) SR= (350 Hours Hours) $24.00 per Hour = (20 Hours) $24.00 per Hour = $480 U Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 66. Labor's variance rate for October is: A. $495 U B. $495 F C. $525 U D. $525 F Labour rate variance = AH(AR - SR) = 350 hours ($25.50 per hour - $24.00 per hour) = 350 hours ($1.50 an hour) = $525 U Learning Objective: Calculate direct labor efficiency and dispersion rate and explain their significance to 44 67. Variable overhead efficiency variance for October is: A. $82 U B. $80 U C. $82 F D. $80 F SH = 1100 units 0.3 per unit = 330 hours Variable overhead variance = (AH - SH) SR = (350 hours hours) $4.00 per hour = (20 hours) $4.00 per hour = $80 U 68. The variable overhead variance rate for October is: A. $33 F B. $35 U C. $35 F D. $33 U Variable overhead variance rate = AH(AR - SR) = 350 hours ($4.10 per hour - $4.00 per hour) = 350 hours ($0.10 per hour) = $35 U 45 Kibodeaux Corporation makes a product with the following standard costs: The company has budgeted for production of 3,300 units in June , but actual production is 3,400 units. The company used 33,240 liters of direct material and 320 direct labor hours to produce this production. The company purchased 35,900 liters of direct material at $4.90 per liter. The actual direct labor force level was $22.70 an hour, and the actual variable overhead rate was $2.70 an hour. The company applies variable overheads based on direct labor hours. Variance of purchases of direct materials is calculated when buying materials. 69. The variance in the amount of materials for June is: A. $392 U B. $392 F C. $400 F D. $400 U SQ = 3400 units 9.8 liters per unit = 33.3 20 liters of Variance amount of materials = (AQ - SQ) SP = (33240 liters - 33,320 liters) $5.00 per liter = (-80 liters) $5.00 per liter = $400 F 46 70. The variance in materials prices for June is: A. $3,332 F B. $3,590 U C. $3,332 U D. $3,590 F Price Variance = AQ (AP - SP) = 35,900 liters ($4.90 per liter - $5.00 per liter) = 35,900 liters (-$0.10 per liter) = $3,590 F 71. The dispersion of labor efficiency for June is: A. $454 F B. $454 U C. $440 F D. $440 U SH = 3,400 units 0.1 hours per unit = 340 hours of Labor Efficiency Variance = (AH - SH) SR = (320 hours) $22 per hour = (-20 hours) $22 per hour = $440 F Learning goal: Calculate direct performance and dispersion rate and explain their significance to 47 72. Labor's rate variance for June is: A. $238 U B. $238 F C. $224 U D. $224 F Labour rate variance = AH(AR - SR) = 320 hours ($22.70 per hour - $22.00 per hour) = 320 hours ($0.70 per hour) = $224 U Learning Objective: Calculate direct labor efficiency and course variances and explain their significance 73. The variance on the effectiveness of variable overheads for June is: A. $54 F B. $54 U C. $60 F D. $60 U SH = 3,400 units 0.1 hours per unit = 340 hours Variable air efficiency variance = (AH - SH) SR = (320 hours) $3 per hour = (-20 hours) $3 per hour = $60 F 48 74. Variable overhead variance rate for June is: A. $96 U B. $102 F C. $96 F D. $102 U Variable overhead speed variance = AH(AR - SR) = 320 hours ($2.70 per hour - $3.00 per hour) = 320 hours (-$0,30 per hour) = $96 F Gentile Corporation manufactures a product with the following standard costs: the company produced 6,000 units in May using 36,970 kilograms of direct material and 4,340 straight labor hours. During the month, the company purchased 40,400 kilograms of direct $4.70 per kilogram. Actual direct level of manpower per hour and the actual variable invoice rate was $2.70 an hour. The company applies variable overheads based on direct labor hours. Variance of direct materials is purchased when purchasing materials 49 75. The variance in the amount of materials for May is: A. $13,150 F B. $12,361 F C. $13,150 U D. $12,361 U SQ = 6,000 units 6.6 kilograms per unit = 39 6,36,970 kilograms, number of dispersion materials = (AQ - SQ) SP = (36,970 kilograms - 39,600 kilograms) $5.00 per kilogram = (-2,630 kilograms) $5.00 per kilogram = $13,150 F 76. The variance in materials prices for May is: A. $11,880 U B. $11,880 F C. $12,120 F D. $12,120 U Material price variance = AQ (AP - SP) = 40,400 kilograms ($4.70 per kilogram - $5.00 per kilogram) = 40,400 kilograms (-0.30 per kilogram) = $12.120 F 50 77. Labor efficiency variance for May is: A. $6,302 U B. $6,440 U C. $6,440 F D. $6,302 F SH = 6,000 units 0.8 hours per unit = 480 0 Hours Of Labor Efficiency Variance = (AH - SH) SR= (4340 hours - 4,800 hours) $14 per hour = (-460 hours) $14 an hour = $6,440 F Learning Goal: Calculate direct labor efficiency and speed deviation and explain their value to 78. Labor's variance rate for May is: A. $1,302 U B. $1,440 U C. $1,440 F D. $1,302 F Labor Rate Variance = AH(AR - SR) = 4,340 hours ($4,340 hours 1 13.70 per hour - $14.00 per hour) = 4,340 hours (-$0.30 per hour) = $1,302 F Learning Goal: Calculate direct labor efficiency and speed variances and explain their value to 51 79. The variance on the effectiveness of variable overheads for May is: A. $1,380 F B. $1,242 U C. $1,242 F D. $1380 U SH = 6,000 units 0.8 hours per unit = 4,800 hours Variable overhead efficiency = (AH - SH) SR= (4,340 hours - 4,800 hours) $3,00 per hour = (-460 hours) $3.00 an hour = $1,380 F 80. The variance of the variable overhead rate for May is: A. $1,440 U B. $1,302 F C. $1,302 U D. $1,440 F Variable Overhead Variance Rate = AH(AR - SR) = 4,340 hours ($1 2.70 per hour - $3.00 per hour) = 4,340 hours (-$0.30 per hour) = $1,302 F 52 Tidd Corporation makes the product with the following standard costs: The Company reported the following results regarding this product in November. The company applies variable overheads based on direct labor hours. Variance of purchases of direct materials is calculated when buying materials. 81. The variance in the amount of materials for November is: A. $7,530 U B. $7,028 U C. $7530 F D. $7,028 F SQ = 9,000 units 4.7 grams per unit = 4230 0 grams of materials variance amount = (AQ - SQ) SP = (44810 grams - 42,300 grams) $3.00 per gram = (2510 grams) $3.00 per gram = $7,530 U 53 82. The variance in materials prices for November is: A. $8,460 F B. $8,460 U C. $9,460 U D. $9,460 F Material variance price = (AQ AP) - (AQ SP) = $132,440 - (47,300 grams $3.00 per gram) = $132,440 - $141,900 = $9,460 F 83. Variance праці за листопад є: A. $ 10720 U B. $ 10720 F C. $ 10653 U D. $ 10653 F SH = = units 0.8 hours per unit = 7200 hours Labor efficiency variance = (AH - SH) SR = (7870 hours - 7200 hours) $16 per hour = (670 hours) $16 an hour = $10,720 U Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 54 84. Labor's rate variance for November is: A. $787 U B. $720 F C. $787 F D. $720 U Labor Rate Variance = (AH AR) - (AH SR) = $100 125,133 - (7870 hours $16.00 per hour) = $125,133 - $125,920 = $787 F Learning goal: Calculate direct labor efficiency and speed variances and explain their value to 85. The variance on the effectiveness of variable overheads for November is: A. $2,680 F B. $2,546 F C. $2,680 U D. $2,546 U SH = 9,000 units 0.8 hours per unit = 7,200 hours Variable air efficiency variance = (AH - SH) SR = (7,870 hours - 7,200 hours) $4 per hour = (670 hours) $4 per hour = $2,680 U 55 86. The variance of the variable overhead rate for November is: A. $1,574 F B. $1,440 U C. $1,574 U D. $1,440 F Variable overhead rate variance = (AH AR) - (AH SR) = $29,906 - (7,870 hours $4 an hour) = $29,906-$31,480 = $1,574 F Caquias Corporation makes the product with the following standard costs: The Company reported the following results regarding this product in August. The company applies variable overheads based on direct labor hours. Dispersion of direct materials of purchases is calculated when purchasing materials 56 87. The variance in the amount of materials for August is: A. $1,620 F B. $1,674 F C. $1,620 U D. $1674 U SQ = 2100 units 5.3 kilograms = 11,113 0 kilograms Variance of materials = (AQ - SQ) SP = (10,860 kilograms - 11,130 kilograms) $6.00 per kilogram = (-270 kilograms) $6.00 per kilogram = $1,620 The variance in materials prices for August is: A. $2,360 U B. $2,360 F C. $2,226 U D. $2.226 F Material price variance = (AQ AP) - (AQ SP) = $73,160 - (11,800 kilograms $6.00 per kilogram) = $73,160 - $70,800 = $2,360 U 57,89. The labor efficiency variance for August is: A. $480 F B. $500 U C. $500 F D. $480 U SH = 2100 units 0.5 hours per unit = 1.5 hours per unit 050 hours Variable overhead dispersion efficiency = (AH - SH) SR = (1100 hours - 1050 hours) $10.00 per hour = (50 hours) $10.00 per hour = $500 U Training goal: Calculate direct labor efficiency and dispersion rate and explain their value to 90. Labor's rate variance for August is: A. $440 F B. $440 U C. $420 U D. $420 F Labor Rate Variance = (AH AR) - (AH SR) = $10560 - (1100 hours $10.00 per hour) = $10,560 - $11,000 = $440 F Learning Goal: Calculate direct labor efficiency and course variance and explain their significance to 58 91. Variable overhead performance variance for August is: A. $200 F B. $205 U C. $205 F D. $200 U SH = 2,100 units 0.5 hours per unit = 1,050 hours Variable air efficiency variance = (AH - SH) SR= (1,100 hours - 1,050 hours) per hour = (50 hours) $4.00 per hour = $200 U 92. Variable consignment speed speed for August is: A. $105 F B. $110 F C. $105 U D. $110 U Variable invoice variance rates = (AH AR) - (AH SR) = $4,510 - (1,100 hours $4.00 per hour) = $4.510 - $4,400 = $110 U 59 Sande Corporation manufactures the product with the following standard costs: In November, the company's budget production is 2,900 units, but actual production is 3,000 units. The company used 27,670 grams of direct material and 1,390 straight labor hours to produce this production. During the month, the company purchased 31,700 grams of direct material worth $196,540. The actual direct cost of the workforce was $29,607, and the actual variable overhead cost was $2,502. The company applies variable overheads based on direct labor hours. Variance of purchases of direct materials is calculated when buying materials. 93. The variance in the amount of materials for November is: A. $420 U B. $434 F C. $420 F D. $434 U SQ = 3000 units 9.2 gram per unit = 27 60 grams Of Variance amount of materials = (AQ - SQ) SP = (27670 grams - 27,600 grams) $6.00 per gram = (70 grams) $6.00 per gram = $420 U 60 94. The variance in materials prices for November is: A. $5,520 F B. $6,340 F C. $5,520 U D. $6,340 U Material variance price = (AQ AP) - (AQ SP) = $196,540 - (31,700 grams $6.00 per gram) = $196,540 - $190,200 = $6,340 U 95. The labor efficiency variance for November is: A. $2,530 U B. $2,530 F C. $2343 F D. $2343 U SH = 3,000 units 0.5 hours per unit = 150 Hour Variable Overhead Efficiency = (AH - SH) SR= (1390 hours - 1,500 hours) $23.00 per hour = (110 hours) $23.00 per hour = $2,530 F Learning Goal: Calculate direct labor efficiency and deviation rate and explain their value to 61 96. Labor's variance rate for November is: A. $2,363 U B. $2,550 F C. $2,550 U D. $2,363 F Labor Rate Variance = (AH AR) - (AH SR) = $29.607 - (1390 hours $23.00 per hour) = $29,607-$31,970 = $2,363 F Training Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 97. The dispersion of variable overhead efficiency for November is: A. $220 U B. $198 F C. $198 U D. $220 F SH = 3,000 units 0.5 hours per unit = 1.5 00 hours Variable overhead efficiency variance = (AH - SH) SR = (1390 hours - 1500 hours) $2.00 per hour = (-110 hours) $2.00 per hour = $220 F 62 98. The variance of the variable overhead rate for November is: A. $300 U B. $278 U C. $300 F D. $278 F Variable Consignment Rate = (AH AR) - (AH SR) = $2,0502 - (1390 hours $2.00 per hour) = $2,502 - $2,780 = $278 Fram Land Corporation manufactures a product with the following standard costs: In March, the company produced 4,700 units using 10,230 kilograms of direct material and 2,210 straight working hours. During the month, the company purchased 10,800 kilograms of direct material worth $76,680. The actual direct cost of the workforce was $38,233, and the actual variable cost was $11,934. V.O. V.O. applies variable overheads based on direct labor hours. Variance of purchases of direct materials is calculated when purchasing materials 63 99. The variance in the amount of materials for March is: A. $5,810 F B. $5,893 U C. $5893 F D. $5810 U SQ = 4700 units 2.0 kilograms per unit = 9.,4000 kilograms Variance of materials = (AQ - SQ) SP = (10,230 kilograms - 9,400 kilograms) $7.00 per kilogram = (830 kilograms) $7.00 per kilogram = $5,810 U 100. The variance in materials prices for March is: A. $940 F B. $1,080 F C. $1,080 U D. $940 U Materials price variance = (AQ AP) - (AQ SP) = $76,680 - (10,800 kilograms $7.00 per kilogram) = $76,680 - $75,600 = $1,080 U 64,101. The labor efficiency variance for March is: A. $2,660 F B. $2,422 F C. $2,422 U D. $2,660 U SH = 4,700 units 0.5 hours per unit = 2.2 35 0 hours Labor Efficiency Variance = (AH - SH) SR= (2210 hours - 2,350 hours) $19.00 per hour = (-140 hours) $19.00 an hour = $2,660 F Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their 102 values. Labor's rate variance for March is: A. $3,757 U B. $3,757 F C. $3,995 U D. $3.995 F Labor Rate Variance = (AH AR) - (AH SR) = $100 38,233 - (2210 hours $19.00 an hour) = $38,233-$41,990 = $3,757 F Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 65,103. Variable overhead performance variance for March is: A. $756 U B. $700 F C. $756 F D. $700 U SH = 4700 units 0.5 hours per unit = 2350 hours Variable air efficiency variance = (AH - SH) SR = (2210 hours - 2350 hours) $5.00 per hour = (-140 hours) $5.00 per hour = $700 F 104. The variable overhead variance rate for March is: A. $884 U B. $884 F C. $940 U D. $940 F Variable overhead rate variance = (AH AR) - (AH SR) = $11,934 - (2210 hours $5.00 per hour) = $11,934 - $11,050 = $884 U 66 Arrow Industries uses a standard cost system in which direct inventory of materials is carried out at standard cost. Arrow set the following standards for the first costs of a single unit of product. During May, Arrow purchased 160,000 pounds of direct material with a total value of $304,000. The total direct salary for May was $37,800. Arrow produced 19,000 units of product during May using 142,500 pounds of direct material and 5,000 straight labor hours Variance of direct materials prices for May is: A. $16,000 favorable B. $16,000 unfavorable C. $14,250 favorable D. $14,250 unfavorable price of variance materials = (AQ AP) - (AQ SP) = $304,000 - (160,000 pounds $1 .80 per pound) = $304,000 - $288,000 = $16,000 U Source: CMA, adapted 67 106. The variance in the amount of direct materials for May is: A. $14,400 unfavorable B. $1,100 favorable C. $17,100 unfavorable D. $17,100 favorable SQ = 19,000 units 8 per unit = 152,000 pounds Number of variance materials = (AQ - SQ) SP = (142,500 pounds - 152,000 pounds) $1.80 per pound = (-9,500 pounds) pounds) per pound = $17,100 F Source: CMA, adapted 107. Direct labor rate variance for May: A. $2,200 favorable B. $1,900 unfavorable C. $2,000 unfavorable D. $2,090 favorable labor rate variance = (AQ AP) - (AQ SP) = $37,800 - (5,000 hours $8.00 per hour) = $37, 800- $40,000 = $2,200 F Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value Source: CMA, adapted 68 108. Direct labor efficiency variance for May: A. $2,200 favorable B. $2,000 favorable C. $2,000 unfavorable D. $1,800 unfavorable SH = 19,000 units 0.25 hours per unit = 4.0 750 hours Labor Efficiency Variance = (AH - SH) SR= (5,000 hours - 4,750 hours) $8 an hour = (250 hours) $8 an hour = $2,000 U Learning Goal: Calculate direct labor efficiency and dispersion rate and explain their value Source : CMA, adapted by Thompson uses standard value and has set the following direct material and direct labor standards for each Lepta unit. Direct Materials: 2 gallons at $4 per gallon Straight Labor: 0.5 hours at $8 an hour During September, the company made 6,000 lepts and incurred the following costs: Direct materials purchased: 13,400 gallons at $4.10 per gallon Direct Materials used: 12,600 gallons Direct Labor used: 2,800 hours at $7.65 per hour 69,109. The variance in materials prices for September was: A. $1,340 favorable B. $1,260 favorable C. $1,260 unfavorable D. $1,340 adverse variance in materials prices = AQ (AP - SP) = 13,400 gallons ($4.10 per gallon - $4.00 per gallon) = 13,400 gallons ($0.10 per gallon) = $1,340 U 110. The variance in the amount of materials for September was: A. $2,460 unfavorable B. $5,600 unfavorable C. $2,400 unfavorable D. $5,740 unfavorable SQ= 6,000 units 2 gallons per unit = 12,000 gal Materials Variance Quantity = (AQ - SQ) SP = (12,600 gallons - 12,000 gallons) $4.00 per gallon= (600 gallons) $4.00 per gallon = $2,400 U 70,111. Labor's variance rate for September was: A. $1,530 unfavorable B. $980 favorable C. $280 favorable D. $980 unfavorable labor rate variance = AH(AR - SR) = 2800 hours ($7.65 per hour - $8.00 per hour) = 2,800 hours (-$0.35 per hour) = $980 F Training goal: Calculate direct labor efficiency and dispersion rate and explain their significance 112. The variance with increased labor efficiency for September was: A. $33,600 favorable B. $1,600 favorable C. $22,400 favorable D. $3,200 favorable SH = 6,000 units 0.5 hours per unit = 3,000 units of hour Variance labor efficiency = (AH - SH) SR = (2800 hours - 3,000 hours) $8.00 per hour = (-200 hours) $8.00 an hour = $1,600 F Training Goal: Calculate direct labor efficiency and dispersion rate and explain their value to 71 Geurtz uses standard costs. The company manufactures and sells a single product called Roff. The following data on month: Actual cost of direct materials and used: $65,560 Material price variance: $5,960 Unfavorable Total Variance Materials: $22,360 Unfavorable Standard Cost per Pound Material: $4 Standard Cost per Direct Working Hour: $105 Actual direct labor hours: 6,500 hours Of Labor Efficiency Variance: $3,500 favorable Standard number of direct working hours per Roff unit: 2 hours Total labor variance: $400 unfavorable 113. The total number of Roff units produced during August is: A. 10,800 B. 14,400 C. 3,600 D. 6500 Labour Efficiency Variance = (AH SR) - (SH SR) = (6500 hours $5 per hour) - (2 hours per unit Actual production units $5 per hour) = - $3,500 $32,500-$10 per unit Actual units of production = -$ 3,500 $10 per unit Actual production units = $36,000 Actual units produced = $36,000 $10 per unit = 3,600 units Learning goal : Calculate direct labor efficiency and speed variances and explain their significance Level: Hard