

QUESTIONS - STANDARD COSTING

QUESTION 1. The Lamp Shade Company makes table lamps, for which the following standards have been developed:

	Standard Inputs Expected for Each <u>Unit of Output</u>	Standard Price Expected per <u>Unit of Output</u>
Direct materials	20 pounds	\$2 per pound
Direct labor	6 hours	\$8 per hour

During January, production of 110 lamps was expected, but 100 lamps were actually completed. Direct materials purchased and used were 2,100 pounds at an actual price of \$1.90 per pound. Direct labor cost for the month was \$5,270, and the actual pay per hour was \$8.50.

Required:

- a. Compute the direct materials price and efficiency variances for the year.
- b. Compute the direct labor price and efficiency variances for the year.
- c. Compute the static budget variances for direct materials and direct labor for the year.

QUESTION 2. Root Industries, developed standard costs for direct material and direct labor. In 2007, Root estimated the following standard costs for one of their major products, plastic container.

	<u>Budgeted quantity</u>	<u>Budgeted price</u>
Direct materials	0.10 kg	€ 20 per kg
Direct labor	0.05 hour	€ 15 per hour

- During June, Root produced and sold 5,000 containers.
 - The company purchased and used 480 kg of direct materials at €22 per kg.
 - 250 direct manufacturing labor-hours used at an average wage of € 16 per hour.
- a. Find the direct material and direct labor flexible-budget variances.
 - b. Find the direct material price and efficiency variances.
 - d. Find the direct manufacturing labor rate and efficiency variances.

QUESTION 3. Light Company prepared the following statement of standard costs at the beginning of the year:

Standard Cost per unit:

Direct material input	10 kg. at \$25 per kg.
Direct labor input	5 hours at \$30 per labor hour
Variable overhead	\$ 20 per direct labor hour
Fixed overhead	\$ 37,000 per month.

It was budgeted that 1,000 units would be produced and sold each month.

During July, the following results were reported:

Direct material used	\$ 230,000 (10,000 kg. at \$23 per kg.)
Direct labor cost	\$ 133,920 (4,320 hours at \$31 per hour)
Variable overhead	\$ 88,000
Fixed overhead	\$ 36,500

The actual units produced and sold during July was 900.

There were no beginning inventory of direct materials and finished goods.

Required:

1. Determine the direct materials price and efficiency variances.
2. Determine the direct labor rate and efficiency variances.
3. Determine the variable manufacturing overhead spending and efficiency variances.

QUESTION 4. The Moon Company produces and sells a single product. A standard cost card for the product follows:

Standard Cost Card--per unit of product:

Direct materials, 4 kg at \$4.00	\$16.00
Direct labor, 1.5 hours at \$10.00	\$15.00
Variable overhead, 1.5 hours at \$3.00	\$ 4.50
Fixed overhead, 1.5 hours at \$7.00	<u>\$10.50</u>
Standard cost per unit	<u>\$46.00</u>

The company manufactured and sold 18,000 units of product during the year. A total of 70,200 kg of material was purchased during the year at cost of \$4.20 per kg. All of this material was used to manufacture the 18,000 units. The company records showed no beginning or ending inventories for the year. The company worked 29,250 direct labor-hours during the year at a cost of \$9.75 per hour. Overhead cost is applied to products on the basis of direct labor-hours.

Required

- Compute the direct materials price and quantity variances for the year.
- Compute the direct labor rate and efficiency variances for the year.

QUESTION 5. The Shadow Company makes table lamps, for which the following standards have been developed:

	Standard Inputs Expected for Each <u>Unit of Output</u>	Standard Price Expected per <u>Unit of Output</u>
Direct materials	20 pounds	\$2 per pound
Direct labor	6 hours	\$8 per hour

During July, production of 100 lamps was expected, but 110 lamps were actually completed. Direct materials purchased and used were 2,100 pounds at an actual price of \$2.20 per pound. Direct labor cost for the month was \$5,310, and the actual pay per hour was \$9.00.

Required:

- How much is the direct-labor efficiency variance for the month of July?
- How much is the direct-material price variance for July?

QUESTION 6. The following data for the telephone company pertain to the production of 450 rolls of telephone wire during June. Selected items are omitted because the costing records were lost in a wind storm.

Direct Materials (All materials purchased were used.)

- Standard cost per roll: a pounds at \$4.00 per pound.
- Total actual cost: b pounds costing \$9,600.
- Standard cost allowed for units produced was \$9,000.
- Materials price variance: c .
- Materials efficiency variance was \$80 unfavorable.

Direct Manufacturing Labor

- Standard cost is 3 hours per roll at \$8.00 per hour.
- Actual cost per hour was \$8.25.
- Total actual cost: d .
- Labor price variance: e .
- Labor efficiency variance was \$400 unfavorable.

Compute the missing elements in the report represented by the lettered items.

QUESTION 7. The Porter Company has a standard cost system. In July the company purchased and used 22,500 kg of direct material at an actual cost of \$53,000; the materials quantity variance was \$1,875 Unfavorable; and the standard quantity of materials allowed for July production was 21,750 kg. How much was the materials price variance for July?

QUESTION 8. Borden Enterprises uses standard costing. For the month of April, the company reported the following data:

- Standard direct labor rate: \$10 per hour
- Standard hours allowed for actual production: 8,000
- Actual direct labor rate: \$9.50 per hour
- Labor efficiency variance: \$4,800 F

How much was the labor rate variance for April?

QUESTION 9. Kelebek Manufacturing manufactures and sells a model of tables called Ocean. Following data was gathered to prepare the budget for 2008:

Direct Material (Wood)	4 m ² per table at €10 per m ²
Direct manufacturing labor	2 hours per table at €25 per hour

Kelebek's management expects to sell 3,900 tables during 2008 at an estimated selling price of €250 per table.

Variable manufacturing overhead is allocated at the rate of € 5 direct labor hour. There are also € 40,000 fixed manufacturing overhead costs budgeted for 2008. Budgeted marketing and other non-manufacturing costs are € 60,000 for 2008.

<u>Inventory estimations:</u>	<u>01/01/2008</u>	<u>31/12/2008</u>
Direct material- wood	1,000 m ²	2,000 m ²
Ocean tables	600 units	500 units

Assume that Kelebek uses FIFO inventory method. There was no ending or beginning WIP inventory. Prepare ending inventory budget for both direct materials and finished goods