

### Exercise 1

The company plans to produce 6,000 pieces of a single type of product in the month of June. According to the standards, direct material is set at 900 CZK per piece and direct wages at 560 CZK per piece. The budgeted production overhead is CZK 1,800,000, the budgeted administrative overhead is CZK 960,000. Compile a preliminary estimate of the product at the level of own performance costs.

### Exercise 2

The following costs were accounted for (see following table).

- Calculate your own costs for 1 bottle of 0.7 l. 966,500 liters of cider were produced

<b>These costs per month were accounted for</b>	
<b>Costs</b>	<b>CZK</b>
Material consumption	650 400
Wages of production workers	130 800
Overheads	228 200
Total production costs	1 009 400

### Exercise 3

Chiphard Works collects its cost data using the job-order cost system. For Job 123, the following data are available.

<b>Direct Materials</b>	
7/14 Issued	\$1,200
7/20 Issued	650
7/25 Issued	350
	\$2,200

<b>Direct Labour</b>	
Week of July 20	180 hours / \$6.50
Week of July 26	140 hours / \$7.25

Factory overhead is applied at the rate of \$4.50 per direct labour hour.

We will compute

- a) the cost of Job 123 and
- b) the sales price of the job, assuming that it was contracted with a mark-up of 40 percent of cost.

#### **Exercise 4**

Two companies have prepared the following budgeted data for the year 2023:

	<b>Company X</b>	<b>Company Y</b>
Predetermined rate based on	Machine hours	Direct labour cost
Budgeted overhead	\$200,000	\$240,000
Budgeted machine hours	100,000	
Budgeted direct labour cost		\$160,000
Predetermined overhead rate	\$2 per machine hour	150 % of direct labour cost

Assume that actual overhead costs and the actual level of activity for 2023 for each firm are shown as follows:

	<b>Company X</b>	<b>Company Y</b>
Actual overhead costs	\$198,000	\$256,000
Actual machine hours	96,000	
Actual direct labour cost		\$176,000

Note that for each company, the actual cost and activity data differ from the budgeted figures used in calculating the predetermined overhead rate. The computation of the resulting underapplied and overapplied overhead for each company is provided below:

#### **Exercise 5**

A company uses a budgeted overhead rate in applying overhead to production orders on a labour cost basis for Department A and on a machine hour basis for Department B. At the beginning of the year, the company made the following predictions:

	Department A	Department B	Total
Budgeted factory overhead	\$72,000	\$75,000	\$147,000
Budgeted direct labour cost	\$64,000	\$17,500	\$81,500
Budgeted machine hours	500	10,000	10,500

During the month of January, the cost record for a job order, No. 105, which was processed through both departments, shows the following:

	Department A	Department B	Total
Materials issued	\$30	\$45	\$75
Direct labour cost	\$36	\$25	\$61
Machine hours	6	15	21

- a) Calculate the predetermined overhead rates for each department
- b) Calculate the total applied overhead for job order No. 105
- c) Assume that job order No. 105 consisted of 30 units of product. What is the total cost and unit cost of the job order?

### **Exercise 6**

Refer to example 1 and assume that the company uses a single plan-wide rate based on direct labour costs.

What is

- a) the total applied overhead for job order No. 105 and
- b) the total cost and unit cost of the job order?

### Exercise 7

Determine the costing of the costing unit if you know the following data:

<b>Total</b>		<b>Per unit</b>	
Direct wages	350 000 CZK	Direct wages	50 CZK
Overheads	1 225 000 CZK	Direct material	125 CZK
Machine hours	2 500 hours	Direct energy	35 CZK
		Machine hours	0,15 hours

In the calculation of costs, we will use an allocation base, namely:

1. Direct wages
2. Machine hours