**Exercise 1**

* The company Clean, a.s. business in the field of cleaning services. Its output is therefore a square meter (m2) of tidy area. The company records the following costs:
* consumption of cleaning agents
* consumption of mops, buckets, towels
* labor costs of cleaners
* salary costs of top management (managers, assistants)
* office space rent
* depreciation of washing equipment
* Depreciation of the washing machine
* car depreciation
* travel expenses
* telephones, postage
* marketing costs
* bookkeeping, IT costs

**Exercise 2**

The company has found the following data on its performance:

1. total fixed costs (FC) CZK 15,000

2. variable costs per unit of production (incl.) CZK 10

3. total production (Q) 500 pcs

TASK:

1) Calculate the total variable cost of production (VC).

2) Calculate the fixed cost per unit of production (fc).

3) Calculate the total cost of production (C).

4) Calculate Ø total production costs (ØC).

**Exercise 3**

The maximum annual volume of production (production, output) in the amount of CZK 125,000 can be ensured at an annual fixed cost of CZK 2,400,000. In the monitored period, the production capacity was used only to 95%.

1) Find out free (unused) fixed costs (FCU)

2) Find out how the size of the unit fixed costs has changed

**Exercise 4**

Swimming pool, a.s., is open daily from 10 a.m. to 8 p.m. It is open for approximately 350 days a year (15 days are closed for technical reasons or for holidays). A maximum of 150 people can use the company at one time. The annual amount of fixed costs in 2018 (rent, depreciation, labor costs, marketing) was 52,000 thousand. CZK. In fact, in 2018, the company was in operation for 342 days throughout the opening hours, visited by 182,380 people, who spent a total of 342,184 hours. Find out and interpret the amount of unused fixed costs.

**Exercise 5**

The company produces three types of textiles for the production of sportswear. The usual annual volume of services sold, costs and prices for individual products are as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of product | Amount of production (production volume), quantity, number of products | Variable cost per unit (m), variable unit cost | Price per unit (m) | Fixed costs |
| Lemtex | 1 000 | 390 | 550 |  |
| Bertex | 2 000 | 250 | 400 |  |
| Detex | 4 000 | 75 | 255 |  |
| Total |  |  |  | 1 200 000 |

Tasks:

1. Find out the economic result with the stated volume and structure of outputs.

2. Find out how much revenue the company will reach a turning point with an unchanged performance structure.

3. Determine the volume of revenues that will ensure the achievement of a profit of CZK 500,000 while maintaining the performance structure.

4. The company's management decided to double sales of higher quality and more expensive Lemtex fabrics by 1000 bm and, conversely, to reduce sales of cheaper Detex fabrics by 1,000 bm and believed that with this performance structure, revenues would exceed the break-even point and the company would make a profit. Is this reasoning correct?