Answers:

01:   € 41.250,00   € 7.200,00

$$\frac{}{2500 \text{ hours}} + \frac{}{(1000 \times 1,5 \text{ hours} + 450 \times 2 \text{ hours})} \longrightarrow$$

$\longrightarrow$ € 16,50 + € 3,00 = € 19,50

02:   € 23.160,00   € 5.170,00

$$\frac{}{1.200 \text{ hours}} + \frac{}{(1000 \times 0,5 \text{ hours} + 450 \times 1,5 \text{ hours})} \longrightarrow$$

$\longrightarrow$ € 19,30 + € 4,40 = € 23,70

03: A **standard cost** for one unit of output is the budgeted production cost for that unit. Standard costs are calculated using engineering estimates of standard quantities of inputs, and budgeted prices of those inputs. For example, for an apparel manufacturer, standard quantities of inputs are required yards of fabric per jean and required hours of sewing operator labour per jean. Budgeted prices for those inputs are the budgeted cost per yard of fabric and the budgeted labour wage rate.

Standard quantities of inputs can be established based on ideal performance, or on expected performance, but are usually based on **efficient and attainable** performance. Research in psychology has determined that most people will exert the greatest effort when goals are somewhat difficult to attain, but not extremely difficult. If goals are easily attained, managers and employees might not work as hard as they would if goals are challenging. But also, if goals appear out of reach, managers and employees might resign themselves to falling short of the goal, and might not work as hard as they otherwise would. For this reason, standards are often established based on **efficient and attainable** performance.

Hence, a standard is a type of budgeted number; one characterized by a certain amount of rigor in its determination, and by its ability to motivate managers and employees to work towards the company's objectives for production efficiency and cost control.

There is an important distinction between standard costs and a standard costing system. Standard costs are a component in a standard costing system. However, even companies that do not use standard costing systems can utilize standards for budgeting, planning, and variance analysis.

04: Pair of glasses P

Materials : 4,2 kg x € 7,50   = € 31,50

Machine A: 1,5 H x € 19,50 = € 29,25

Machine B: 0,5 H x € 23,70 = € 11,85

_____ +

Standard Cost Price   € 72,60

05: Pair of glasses Q

Materials : 1,6 kg x € 7,50   = € 12,00

Machine A: 2,0 H x € 19,50 = €   39,00

Machine B: 1,5 H x € 23,70 = € 35,55

_____ +

Standard Cost Price   € 86,55

06: **12 Reasons Budgeting Can Improve your Life**

1. A budget is a guide that tells you whether you're going in the direction you want to be headed in financially. You may have goals and dreams but if you don't set up guidelines for reaching them and you don't measure your progress, you may end up going so far in the wrong direction you can never make it back. Can you imagine the government or a major corporation operating without a budget? No, and neither should you.

2. A budget lets you control your money instead of your money controlling you.

3. A budget will tell you if you're living within your means. Before the widespread use of credit cards, you could tell if you were living within your means because you had money left over after paying all your bills. The use of credit cards has made this much less obvious.

4. A budget can help you meet your savings goals. It includes a mechanism for setting aside money for savings and investments.

5. Following a realistic budget frees up spare cash so you can use your money on the things that really matter to you instead of frittering it away on things you don't even remember buying.

6. A budget helps your entire family focus on common goals.

7. A budget helps you prepare for emergencies or large or unanticipated expenses that

might otherwise knock you for a loop financially.

8. A budget can improve your marriage. A good budget is not just a spending plan; it's a

communication tool. Done right, a budget can bring the two of you closer together as

you identify and work towards common goals and reduce arguments about money.

9. A budget reveals areas where you're spending too much money so you can refocus on

your most important goals.

10. A budget can keep you out of debt or help you get out of debt.

11. A budget actually creates extra money for you to do use on things that matter to you.

12. A budget helps you sleep better at night because you don't lie awake worrying about

how you're going to make ends meet.

07: **How to control a budget**

Checklist

1 Make sure the budget you have prepared includes all the key indicators you wish to control.

2 Give responsibilities for budget items only to individuals with the authority to control the outcome.

3 Schedule regular reviews of budget performance.

4 Review budgeted figures to identify cash flow or other problems which can be anticipated and tackled in advance.

5 Compare margins, working capital and other key ratios with historical figures to identify how performance is expected to improve or deteriorate.

6 Carry out a sensitivity analysis to see what effect different outcomes could have on performance.

7 Focus on controlling items which could have a significant effect on overall business performance.

8 As figures become available, compare actual sales to budget and identify reasons for this sales variance.

9 Determine how fixed costs differed from budget and whether any changes are likely to be permanent.

10 Analyse the extent to which variances in variable costs reflect sales variances, or whether prices or efficiency have changed.

11 Identify to what extent variances in income or expenditure reflect differences in timing rather than performance.

12 Take action to sort out underperformance which can be controlled.

13 Capitalise on unexpected favourable changes.

14 Revise future budgets in the light of the information you now have.

Cardinal rules

Do:

- focus on key indicators which have a significant effect on performance
- use budgets to anticipate problems
- regularly review performance and find reasons for variances
- use budget control as a prompt to action
- revise budgets as more up-to-date information becomes available

Don't:

- confuse changes in timing with permanent changes to the levels of income or expenditure
- ignore favourable variances without finding an explanation
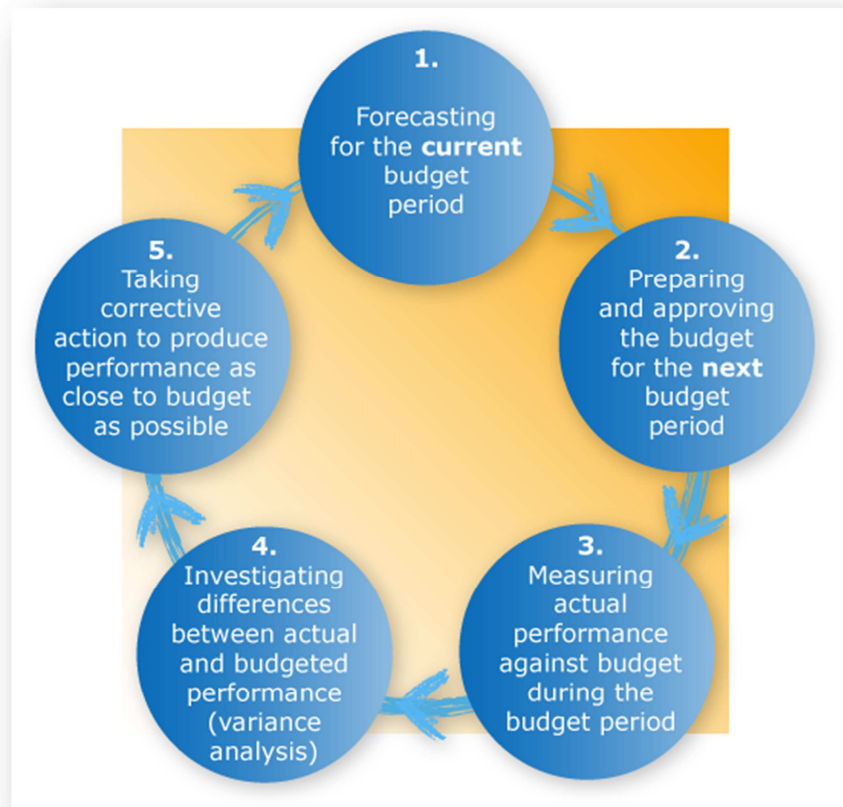
08:

Efficiency Differences:

Materials:

950 P x 4,2 kg   = 3.990 kg

500 Q x 1,6 kg =   800 kg

                    _____ +

You may use   4.790 kg

Real use   4.730 kg

                         _____ -

              60 kg (positive) x € 7,50 = € 450,00 (positive)

Machine hours A:

950 P x 1,5 hours   =   1.425 hours

500 Q x 2,0 hours =   1.000 hours

                      _____ +

You may use   2.425 hours

Real use   2.455 hours

                         _____ -

              30 hours (negative) x € 19,50 = € 585,00 (negative)

Machine hours B:

950 P x 0,5 hours   =   475 hours

500 Q x 1,5 hours =   750 hours

                      _____ +

You may use   1.225 hours

Real use   1.215 hours

                         _____ -

              10 hours (positive) x € 23,70 = € 237,00 (positive)

Price differences:

(€ 7,80 - € 7,50) x 4.730 kg = € 0,30 x 4.730 kg = € 1.419,00 (negative)

Occupying differences:

P: Budget 1.000 P

    Real   950 P

           _____ -

             50 P (negative) x € 16,50

                    x € 19,30

LUCKY!!

Q: Budget 450 Q

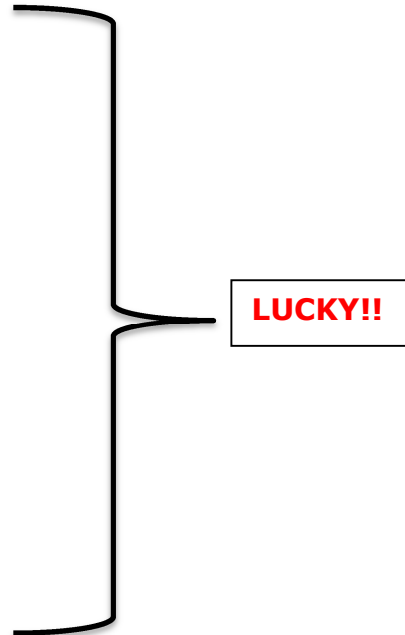   Real   500 Q

           _____ -

             50 Q (positive) x € 16,50

                    x € 19,30

09: Summary:

    <u>Efficiency Differences</u>

        Materials   € 450,00 (positive)

        Machine A   € 585,00 (negative)

        Machine B   € 237,00 (positive)

    <u>Price Differences</u>

    In total materials € 1.419,00 (negative)

    <u>Occupying Differences</u>

    Lucky with € 0,00

                        _____ +

In total for the first 3 months   € 1.317,00 (negative)

10. Yes, it is!

For P:

Fixed costs of Machine A = 5/8 of € 41.250,00 = € 25.781,25

Fixed costs of Machine B = 3/8 of € 23.160,00 = €   8.685,00

_____ +

Total for P of Fixed Costs   €   34.466,25

So for P the Break-even point is:

$$\frac{C}{P - V} = \frac{€\ 34.466,25}{€\ 145,20 - €\ 31,50} = \frac{€\ 34.466,25}{€\ 113,70} = 303 – 304 \text{ pieces P}$$

For Q:

Fixed costs of Machine A = 3/7 of € 41.250,00 = € 15.468,75

Fixed costs of Machine B = 4/7 of € 23.160,00 = € 14.475,00

_____ +

Total for Q of Fixed Costs   €   29.943,75

So for P the Break-even point is:

$$\frac{C}{P - V} = \frac{€\ 29.943,75}{€\ 1473,10 - €\ 12,00} = \frac{€\ 29.943,75}{€\ 161,10} = 186 - 187 \text{ pieces Q}$$

Is control possible?

Of course………………

Control:

P:

Variety costs: 303 P x € 31,50   = €   9.544,50

Fixed costs :   = € 34.466,25

_____ +

Total costs   = € 44.010,75 : 145,20   = 303 – 304 pieces

Q:

Variety costs: 186 Q x € 12,00   = €   2.232,00

Fixed costs :   = € 29.943,75

_____ +

Total costs   = € 32.175,75 : 173,10   = 185-186-187 pieces

11.

Safety margin

For P:

Real 950 pieces

BEA 303 pieces

_____ -

SM   647 pieces

For Q:

Real 500 pieces

BEA 186 pieces

_____ -

SM   314 pieces

Differential pricing:

Method in which a product has different prices based on the type of customer, quantity ordered, delivery time, payment terms, etc. Also called **discriminatory pricing** or **multiple pricing.**

What to do?

Sales price = € 50,00 ex VAT

You only have to look to the variety costs for P (€ 31,50)

So the conclusion is: YES we do!

Because: (€ 50,00 - € 31,50) x 50 pair of glasses = € 925,00 extra profit.

AND WHAT TO DO THE NEXT 3 MONTHS, ENTREPRENEURS?

Performance Management System