Classic pen case

Business, Accounting

ACC 341 Classic Pen Case Assignment You should hand in one page of analysis and two sets of supporting calculation. The first supporting calculation is an ABC system for Classic Pen, constructed by filling in the blanks in the following table. First allocate the total expenses in each row to the various activities, based on information in the case. Then choose a cost driver and calculate the rate per unit of the cost driver. Activities Schedule & Handle Production RunsSet up MachinesKeep Product RecordsRun MachinesTotal Expenses

Indirect labor & related fringes14, 00011, 2002, 800$28, 000* Computer systems$8, 000$2, 000$10, 000 Machinery8, 000$ 8, 000 Maintenance4, 000$ 4, 000 Energy2, 000$ 2, 000 Total activity costs22, 00011, 2004, 80014, 000 52, 000 Cost driver# of runsSetup timeDL HoursMachine Hours Total quantity of cost driver150 runs (Exhibit 2)526 hours200010, 000 Allocation rate per unit of cost driver146. 6721. 292. 401. 40 *This includes half of the $16, 000 fringe benefits. The other half is associated with direct labor – don’t forget to include it in your ABC income statement!

The second supporting calculation is an ABC income statement showing sales revenue minus each type of direct and indirect cost assigned to the four pen types. Add two lines at the bottom of the income statement: one line shows the operating profit per unit for each type of pen based on your ABC calculations, and the other line shows the operating profit per unit based on the traditional-income calculations in Exhibit 1 of the case. The analysis consists of answers to the following questions (about one-half page each). a)Your ABC analysis should show that purple pens are very unprofitable, while blue pens earn most of the factory’s profits. One of the

managers at Classic Pen questions your analysis, saying, “ I can’t believe there’s that much difference in profit per unit between the blue and purple pens. Purple pens sell for ten cents more than blue pens, and material costs are only five cents higher. Labor and machine-hour costs are exactly the same, setup time per run is the same, and we only do twelve production runs for purple pens, compared to 50 for blue pens. So how can the profits be that different? Write a paragraph explaining why per-unit profit is so much lower for purple than for blue pens. In the traditional income statement, overhead costs and indirect labor costs were not linked to the specific products that used them in the process of producing them. They were simply allocated to each uniquely colored pen by the amount of sales they generated, which didn’t take into account the amount ofmoneyand time that was spent on making them. This caused direct labor costs to be spread out among the products, regardless of how much the cost of producing them was.

In the second income statement that was created in the problem, instead of basing these costs on sales they were based upon certain drivers, such as the number of runs and the amount of time preparing the machine and reports done for each product. This helped to allocate the costs of indirect labor and overhead specifically to the products that were using these resources, helping to give a more realistic picture of the revenue generated for a certain color pen versus the costs spent making them.

The purple pens had high quality standards that they had to meet, which required a large amount of time spent on preparing the machines for their runs. It is this relatively large amount spent on indirect labor for purple pens,

not the material costs, that causes them to turn such a lower profit than the blue pens. (b)The current overhead allocation rate at Classic is 300% of direct labor. A few years ago it was only about 200%. In the Bridgeton case we saw the overhead rate going up because products were dropped, and volume (and direct labor) went down while fixed overhead costs remained. But that is clearly not the case here!

At Classic, new products have been added, and production volumes have gone up. If overhead costs are variable, the increase in volume and direct labor would increase total overhead costs but not the overhead rate. If overhead costs are fixed, the increase in volume and direct labor would leave total overhead costs unchanged and decrease the rate. So how can it be that the overhead rate has been increasing at Classic? Write a concise explanation. When Classic only had two different colored pens, overhead allocation rate was much lower because the number of direct labor hours making the products was lower than when the new products were added.

As stated in the case, the amount of time spent on preparing the machines for producing the blue colored ink for pens was less demanding than that of purple or red. For the black colored ink used in the pens, the amount of direct labor spent preparing the machines was nearly non-existent because the vats didn’t need much cleaning out after switching from blue ink, as it did not really affect the quality of the ink color. By adding just two more ink colors, red and purple, the number of direct labor hours significantly increased, which also increased the overhead rate because production was largely increased.

The additional colors increased the number of times the vats needed to be emptied out in order to make and produce all the different colors of ink, which added on to the direct labor hours. The red and purple inks also did not disguise residual ink left in the vat nearly as well as the black ink could, so not only were the emptying the vats more often, they were spending a great deal more time cleaning them out in order to meet the color quality standards needed in order to sell the pens.