Huron automotive company

Case 1. Huron Automotive Company Question 1. Current Method vs. First Proposal vs. Revised Proposal | Current Method | 55. 96 |$/hour | | | | Department: | | CS-29 Injectors (per batch | Spare Parts for Inventory | Work for Other Divisions (per| | | | of 100) |(per typical month) | typical month) | | Casting/stamping | | 1, 175. 6 | 17, 011. 84 | 37, 717. 04 | | Grinding | | | 671. 52 | 15, 109. 20 | 30, 218. 40 | | Machining | | 3, 245. 68 | 62, 395. 40 | 120, 761. 8 | | Custom work | | | | | | |- |- |- | | Assembly | | 1, 958. 60 | | | | | | |- |- | | Total | | | $ 7, 050. 6 | $ 94, 516. 44 | $ 188, 697. 12 | | Sandy Bond’s 1st Proposal | | | | | Department: | | CS-29 Injectors (per batch | Spare Parts for Inventory | Work for Other Divisions (per| | | | of 100) |(per typical month) | typical month) | | Casting/stamping | | 1, 112. 7 | 16, 102. 88 | 35, 701. 78 | | Grinding | | | 577. 68 | 12, 997. 80 | 25, 995. 60 | | Machining | | 5, 076. 16 | 97, 584. 80 | 188, 868. 16 | | Custom work | -| | | | | |- |- | | Assembly | | 1, 406. 65 | | | | | | |- |- | | Total | | | $ 8, 172. 86 | $ 126, 685. 8 | $ 250, 565. 54 | | Sandy Bond’s Revised Proposal | | | | Department: | | CS-29 Injectors | Spare Parts for Inventory | Work for Other Divisions (per| | | |(per batch of 100) |(per typical month) | typical month) | | Casting/stamping | | 1, 115. 52 | 16, 148. 48 | 35, 802. 8 | | Grinding | | | 561. 00 | 12, 622. 50 | 25, 245. 00 | | Machining | | 5, 017. 00 | 96, 447. 50 | 186, 667. 00 | | Custom work | | – | | | | | | |- |- | | Assembly | | 1, 369. 0 | | | | | | | |- |- | | Total | | | $ 8, 063. 42 | $ 125, 218. 48 | $ 247, 714. 88 | Question 3a. Depreciation of equipment for Custom Work Department: $400, 000 / 5 years / 12 months = $6, 666. 67 Exhibit 1 | Calculation of Plantwide Labor and Overhead Hourly Rate Month of July | | | | | Dollars | | Hours | | | Labor: | | | | | | | | Casting/stamping | | | | | | | 54, 604. 0 | | 2, 528 | | | | Grinding | | | | | | | | | 38, 520. 00 | | 2, 140 | | | | Machining | | | | | | | | | |

191, 876. 0 | | 7, 675 | | | | Custom work | | | | reduced by 30% | | | | 57, 165. 00 | | 2, 598 | | | | Assembly | | | | | | | | | | 291, 784. 0 | | 15, 357 | | | | Total Labor | | | | | | | | 633, 949. 0 | | 30, 298 | | | | | | | | | | | | | Overhead: | | | | | | Depreciation / labor | | | | | 1, 101, 482. 0 | | | | | | | | | | | | | | Total Labor and overhead | | $ | | | | | | | 1, 735, 431. 00 | | | | | | | | | | | | | | Hourly rate | | 57. 8 | per hour | 20. 92 | labor | | | Total Labor and O'head / Total Manhours | 36. 35 | overhead | | Prior to new machine: 3, 712 hours @ $55. 96 =$207, 723. 52 After new machine: 2, 598 hours @ $57. 28 =$ 148, 813. 44 Cost difference$ 58, 910. 08 Question 3b. Current overhead cost is $40. 48 * 3, 712 hours = $150, 262. 00 Add: Add'l Overhead$6, 666. 67 – 4, 507. 67 = 2, 159. 00 New Overhead Cost $152, 421. 00 New Total Hours upon purchase 3, 712*70%2, 598. 40

New Hourly Overhead Rate 58. 66 Labor Hourly Rate22. 00 New Custom work hourly Rate80. 66 Prior to acquisition: 3, 712 hours @ 62. 48 =$231, 926 After acquisition: 2, 598 hous @ 80. 66 =$209, 555 Difference$ 22, 371 Question 4. | Department | CS-29 injectors (cost per | | Department | CS-29 injectors (cost per | | | 100 batch) | | | 100 batch) | | Casting/stamping | 1175 | | Casting/stamping | 1112 | Grinding | 672 | | Grinding | 578 | | Machining | 3246 | | Machining | 5076 | | Custom work | | | Custom work | | | |- | | |- | | Assembly | 1959 | | Assembly | 1407 | | Total | 7051 | | Total | 8173 | | | | | | | | | | | | | | | | | | | | | | | | Inventory Cost = | | | Inventory Cost = | | | | | | | | |

Question 5. Direct Material Cost 8000 | Department | CS-30 injectors (Labor per| CS-30 Injectors (Cost | | | 100 units) | per 100 units) | | Casting/stamping | 12 | | | | | 635. 64 | | Grinding | 7 | | | | | 336. 98 | | Machining | 17 | | | | | 1, 487. 4 | | Custom work | | | | |- |- | | Assembly | 35 | | | | | 1, 406. 65 | | Total | |

| | | | 3, 867. 11 | | | | | Inventory Cost = | 8000 + 3867. 11 | | | | | 118. 67 | | | 100 | | CS-30 is profitable over CS-29