

Hsm 260 week 4 assignment



**ASSIGN
BUSTER**

Fixed Costs, Variable Costs, and Break-Even Point Farah Nail Exercise 10.

1 Month Meals Served Total Costs
 July 3, 500 \$20, 500 Low
 August 4, 000 22, 600
 September 4, 200 23, 350
 October 4, 600 24, 500
 November 4, 700 25, 000
 December 4, 900 26, 000 High

Step 1. The difference in service volume between high-low periods is $(4,900 - 3,500) = 1,400$ meals. Step 2. The difference in costs between the high-low period is $(\$26,000 - 20,500) = \$5,500$. Step 3.

The variable cost is now computed. The cost difference $\$5,500$ is divided by the service volume of $1,400$. The variable cost per unit of service is $\$3.93$. Step 4.

Total variable costs are now computed. In the low time period the number of meals provided is $3,500$. The service volume is then multiplied by the cost per unit of $\$3.93$. The total variable cost for the low month is $\$13,755$. The same is done to figure the total variable costs for the high month $4,900 \times \$3.93 =$

$\$19,257$. Step 5. Total fixed costs for the low period are now computed.

The total program cost for the low month is $\$20,500$. If the variable costs $(\$13,755)$ are subtracted from the total costs $(\$20,500)$ the remaining amount is the fixed cost at $\$6,745$. If the same is done for the high month $(\$26,000 - \$19,257)$ the fixed cost is $\$6,743$. Step 6. The break-even point is now ready to be computed using the BEP formula and steps 1-5. The contracted service price with the City of Westchester for $45,000$ meals is $\$5$.

77. The variable costs per meal is \$3.93 per meal, but will earn \$5.77. The difference between the variable cost per meal and the revenue per meal is 5.77X = 6745 + 3.

93X is \$1.84 per meal. This leaves 3,666 as the monthly BEP. Then 3,666 * 12 = 43,992 is the fiscal year BEP. The WHDM needs to provide 43,992 meals during the fiscal year to reach the BEP. The difference between the contracted meals 45,000 and the BEP 43,992 is 1,008.

The potential profit is 1,008 meals * \$1.84 a total profit of \$1,855. Exercise 10.2 The yearly salary of the part-time newsletter coordinator is \$6,000 and the assistant at \$3,900 is a total yearly salary for both of \$9,900 a fixed cost.

The unit cost of printing, preparing, and mailing six bimonthly issues is \$4.50 a variable cost. The newsletter is now \$20 per annual yearly subscription.

This information plus the BEP formula is used to compute the BEP. $20X = 9,900 + 4.50X$
 $15.50X = 9,900$
 $X = 639$
 The BEP is 639.

The new BEP is a feasible solution because together the newsletter coordinator and the assistant can handle up to 650 subscribers. There is a slack capacity of 11 subscribers. This is the amount they are able to handle subtracting the BEP.