

## CASE 9A – MIDDLEHURST HOUSE

Middlehurst House is a daycare center/preschool which operates as a partnership of George Friedman and Bill Compton. The center is in a city that has a large base of twoincome families who have a need for quality day care. The two men started the center this year. Compton contributed \$40,000 to get the business started—to purchase equipment and to operate through the early months. Friedman, who previously managed another center, is the director of the center and draws \$2,000 per month for his services. Partnership profits and losses, after Friedman's salary, are split 75 percent for Compton and 25 percent for Friedman.

Middlehurst House operates from 6 a.m. to 6 p.m., Monday through Friday. It is in a single building that has a capacity limit of 120 children and meets city and state regulations. At present, the center has six classes, all at maximum sizes, structured as follows:

	<u>Number of classes</u>	<u>Children per class</u>	<u>Total children</u>	<u>Monthly tuition per child</u>
2 to 3	<u>2</u>	<u>10</u>	<u>20</u>	\$320
3 to 4	<u>1</u>	<u>15</u>	<u>15</u>	280
4 to 5	<u>1</u>	<u>15</u>	<u>15</u>	280
5 to 6	<u>2</u>	<u>15</u>	<u>30</u>	260

Class sizes are determined by state law which sets a limit on the number of children per instructor. The center uses one instructor per classroom.

Tuition is charged monthly. Minor adjustments are made on an individual basis. In October, the most recent month with data available, revenues were \$21,500 (\$22,600 less \$1,100 adjustments). Monthly revenues should be rather stable since classes are full most of the time.

Expenses for October were:

Salaries for instructors	\$9,600
Salary of director	2,000
Salary of part-time cook	900
Food expenses	2,200
Staff benefits expenses	2,450
Supplies expenses	600
Occupancy and other administrative expenses	<u>3,250</u>
Total expenses	<u>\$21,000</u>

Fixed expenses are the salary of the part-time cook and occupancy and other administrative expenses. The salary of the director is fixed—as a partnership, this is in reality a distribution of profits, but it is included in expenses for comparative purposes.

Food is \$1.25 per student per day. Staff benefits are 10 percent of salaries plus \$200 per person for benefit programs for instructors and the part-time cook. Variable supplies are \$1 per student per month. Step costs are salaries for instructors, averaging \$1,600 per instructor per class.

Friedman wants to increase the quality of service by decreasing class sizes and also by expanding student enrollments. These alternatives are interrelated. Friedman thinks that class sizes are too large and that children are not getting the individual attention they require. Friedman surveyed parents of all 80 students to measure their support for a tuition increase tied to a reduction in class size. For children ages 2 to 5, most parents would support a 25 percent tuition increase, and nearly 50 percent would support a 50 percent increase. Of the 5-to-6 age group parents, nearly three fourths did not want any increase. The remainder said they would support a 25 percent increase but no more.

Proper class size is very subjective. However, Friedman feels that he could achieve a child/instructor ratio of 6 to 1 for the 2-to-3 age group, an 8 to 1 ratio for the 3-to-4 and 4-to-5 age groups, and a 10 to 1 ratio for the 5-to-6 age group.

The center has easily maintained the 80-student level, with each class full. Friedman keeps in touch with waiting-list parents to make certain each is still interested. This list provides children when someone leaves the center. The current waiting list is as follows:

<u>Age group</u>	<u>Number of children</u>	<u>Age group</u>	<u>Number of children</u>
2 to 3	5	4 to 5	4
3 to 4	7	5 to 6	11

Friedman does not start a new class unless more students are on the waiting list than are required per class. Obviously, enough students are on the 5-to-6 age group waiting list to start a new class. Lately, however, he has wondered if the center could make a profit by starting classes with fewer than the requisite number, taking the chance that new students would appear and could be added immediately.

Information from his various inquiries implies that a potential market for quality infant care (0 to 24 months) exists. Friedman doesn't think this expansion would be profitable. However, he has never done an analysis of the situation and has not thought about an appropriate tuition. He believes that the infant/instructor ratio in his center should be no higher than 5 infants to one instructor. The center would have no food costs for the infants.

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***Questions:***

1. Look at each decision separately, as incremental to the current situation, and evaluate the marginal profit:
  - a. If class size is decreased (keeping the same 80 students), what increase in tuition is necessary to keep the current monthly profit level?
  - b. Without regard to (a), is it profitable to create the new class from the waiting list? Explain.
  - c. Use the new fee structure as found in (a). Is it profitable to move to smaller class sizes, if new full classes are created and filled to their new maximums using the waiting list? Show calculations.
  - d. Is a class for infant care profitable if tuition is the same as the proposed class tuition for the 2-to-3 age group?
  
2. Write a brief memo to Friedman and Compton highlighting any concerns that underlie the analyses you have performed in Part 1.