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**CONTRIBUTION MARGIN INCOME STATEMENT**

The basic format of *The House* spreadsheet analysis is the contribution margin income statement. In this format every operating expense of a firm is classified either as a variable expense or as a fixed expense.

Variable expenses for *The House* have been identified as cost of merchandise sold, hourly sales wages, supplies, a portion of utilities, and advertising. These expenses increase or decrease as sales of product rise and fall. They are estimated by determining the relationship of the cost to total sales. This relationship is stated as a proportion or percentage of net sales. Thus the formula for variable costs is entered into the spreadsheet as a percentage multiplied by the amount of net sales. For most retail firms variable costs are separated into two categories. Cost of merchandise sold represents the amount paid specifically for the merchandise that is sold in the store. In the case of *The House* cost of merchandise sold is made up of product costs, freight, and inventory shrinkage.

The cost of merchandise sold percentage is subtracted from 100% to arrive at the gross margin (or gross profit) percentage. The gross profit percentage represents the percentage of each net sales dollar available to pay operating expenses after the cost of the product sold is subtracted. The second category of retail variable expenses includes those operating expenses which tend to rise and fall with the amount of sales. These include sales commissions when applicable) and hourly sales wages, advertising costs and some of the operating costs, depending on the operation of the store. These variable operating expenses are calculated by multiplying net sales by the estimated percentage of these costs in relationship to net sales.

Fixed operating expenses are those expenses that stay the same regardless of the amount of sales that are made. These include costs such as lease payments, depreciation of store furniture and fixtures, most utility costs, interest costs, managerial payroll and other similar costs that must be paid regardless of the amount of sales during a particular month. These costs are not calculated as a proportion of net sales; rather; the total amount of these costs for each month is determined and multiplied by twelve to arrive at an annual total. The fixed operating costs are added to the variable operating costs to arrive at the total operating costs.

Total operating costs are subtracted from the gross margin to arrive at the store’s net profit (or net operating profit). Net profit is the primary measurement of the store’s operating success. A store’s income taxes (not covered in this analysis) are calculated based upon the net profit reported and depend on the legal organization of the retail operation.

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The contribution margin income statement is a common tool used for analysis of operating activities because of the ease by which “what-if” scenarios can be entered to determine their impact on operating profit. Changes in the proportion of variable costs to net sales (such as those related to price increases or decreases) can be analyzed after a simple change to the cost of merchandise sold percentages or to the variable operating cost percentages. Changes in fixed costs are entered directly into the fixed cost calculation.

When the contribution margin income statement has been correctly entered into a spreadsheet analysis, these simple adjustments to the formula will very quickly determine the potential impact of the scenario on the net operating profit of the store. This is the approach that will be taken in the exercises.