

## Managerial Accounting and Cost Concepts

153. Bill Pope has developed a new device that is so exciting he is considering quitting his job in order to produce and market it on a large-scale basis. Bill will rent a garage for \$300 per month for production purposes. Utilities will cost \$40 per month. Bill has already taken an industrial design course at the local community college to help prepare for this venture. The course cost \$300. Bill will rent production equipment at a monthly cost of \$800. He estimates the material cost per unit will be \$5, and the labor cost will be \$3. He will hire workers and spend his time promoting the product. To do this he will quit his job which pays \$3,000 per month. Advertising and promotion will cost \$900 per month.

Required:

Complete the chart below by placing an "X" under each heading that helps to identify the cost involved. There can be "Xs" placed under more than one heading for a single cost, e.g., a cost might be a sunk cost, an overhead cost and a product cost; there would be an "X" placed under each of these headings opposite the cost.

	Opportunity Cost	Sunk Cost	Variable Cost	Fixed Cost	Manufacturing Overhead Cost	Product Cost	Selling Cost	Differential Cost*
Garage rent								
Utilities								
Cost of the industrial design course								
Equipment rented								
Material cost								
Labor cost								
Present salary								
Advertising								

\* Between the alternatives of going into business to make the device or not going into business to make the device.

163. Utility costs at one of Helker Corporation's factories are listed below:

	Machine-Hours	Utility Cost
January .....	4,711	\$34,799
February .....	4,780	\$35,138
March .....	4,704	\$34,762
April .....	4,768	\$35,093
May .....	4,723	\$34,872
June .....	4,721	\$34,840
July .....	4,759	\$35,053
August .....	4,730	\$34,918
September .....	4,720	\$34,834

Management believes that utility cost is a mixed cost that depends on machine-hours.

Required:

Estimate the variable cost per machine-hour and the fixed cost per month using the high-low method. Show your work! Round off all calculations to the nearest whole cent.

166 Whitman Corporation, a merchandising company, reported sales of 7,400 units for May at a selling price of \$677 per unit. The cost of goods sold (all variable) was \$441 per unit and the variable selling expense was \$54 per unit. The total fixed selling expense was \$155,600. The variable administrative expense was \$24 per unit and the total fixed administrative expense was \$370,400.

Required:

- a. Prepare a contribution format income statement for May.
- b. Prepare a traditional format income statement for May.