

AC202 Management Accounting
Exercise # 6: Cost Behavior: Analysis and Use

Q.1 Cost Function

The Pacific Corporation operates car rental agencies at more than 20 airports. Customers can choose from one of the three contracts for car rentals of one day or less:

- Contract 1: \$50 for the day
- Contract 2: \$30 for the day plus \$0.20 per mile traveled
- Contract 3: \$1 per mile traveled

Required: Express each contract as a linear cost function of the form $y = a + bX$ and identify each contract as a variable-, fixed-, or mixed-cost function.

Q. 2 High-Low Method

The controller of the IG Company wants you to estimate a cost function from the following information in a general ledger account called Setup:

Month	Machine-Hours	Setup Costs
January	6,000	\$4,000
February	9,500	\$5,500
March	8,000	\$4,800
April	6,200	\$3,950
May	10,000	\$5,400
June	7,500	\$5,000

Required: Estimate the cost function for setup using high-low method.

Q. 3 Account Analysis Method

Cleaner Co. operates a car wash. Incoming cars are put on an automatic conveyor belt. Cars are washed as the conveyor belt carries them from the start station to the finish station. After a car moves off the conveyor belt, it is dried manually. Workers then clean and vacuum the inside of the car. Cleaner serviced 80,000 cars in 20x1. Cleaner reports the following costs for 20x1.

Account Description	Costs	Cost Behavior?
Car wash labor	\$260,000	
Soap, cloth, and supplies	42,000	
Water	38,000	
Electric power to move conveyor belt	72,000	
Depreciation (straight-line basis)	64,000	
Salaries	46,000	

- 1) Classify each account as variable or fixed with respect to the number of cars washed.
- 2) Suppose Cleaner washed 90,000 cars in 20x1. Use the cost classification you developed in requirement 1 to estimate Cleaner's total costs in 20x1.

