1 A number of costs that are commonly allocated are listed in the following table followed by two alternative cost allocation bases.

Cost Description	Allocation Base Alternatives	
Cafeteria costs	Direct labor costs	Number of employees
Computer system costs	Number of departments	Amount of computer time used
Indirect labor costs	Direct labor hours	Number of supervisors
Indirect materials	Direct labor hours	Direct material dollars
Factory rent	Number of departments	Square footage
Fringe benefits costs	Number of departments	Number of employees
Housekeeping costs	Square footage	Number of employees
Joint costs	Number of joint products	Sales value at split-off
Maintenance costs	Machine hours	Number of employees
Personnel department costs	Number of employees	Number of departments

Required:
For each cost listed, circle the cost allocation base that you believe would be more appropriate for allocating the cost.

2. Martin's is a store with three departments, Appliances, Tools, and Home Improvements. The company expects to incur the following indirect costs related to its operations:

Store manager's salary
Store supplies
Electric bill
Clerical staff salaries
Payroll taxes
Office supplies
Water bill
Sewer bill
Medical insurance
Vacation pay

Required:

1) Organize the indirect costs into three cost pools: Store Administration, Utilities, and Fringe Benefit Costs, assuming that each department is a cost object
2) Identify an appropriate cost driver for each cost pool.

3. Jefferson Company expects to incur $450,000 in manufacturing overhead costs during 2014. Other budget information follows:

	Department A	Department B	Department C
Direct labor hours	15,000	5,000	20,000
Machine hours	8,000	10,000	12,000

Required:

1) Use direct labor hours as the cost driver to compute the allocation rate. Determine the amount of budgeted overhead cost for each department.
2) Use machine hours as the cost driver to compute the allocation. Determine the amount of budgeted overhead cost for each department.
3) Assume that Department A manufactured a product that required 160 direct labor hours and 85 machine hours. If overhead is allocated based on direct labor hours, how much overhead would be allocated to this product?
4) Assume that Department A manufactured a product that required 160 direct labor hours and 85 machine hours. If overhead is allocated based on machine hours, how much overhead would be allocated to this product?

4. Harrison Company expects to incur $600,000 in manufacturing overhead for the coming year. The company makes two products, A and B, and it has accumulated the following budget information for the products:

	Product A	Product B	Total
Number of units to be produced	10,000	5,000	15,000
Direct labor hours	25,000	5,000	30,000
Machine hours	15,000	30,000	45,000

Required:

1) Use direct labor hours as the cost driver to compute the allocation rate. Determine the amount of budgeted overhead to be allocated to each unit of product A.
2) Use machine hours as the cost driver to compute the allocation rate. Determine the amount of budgeted overhead to be allocated to each unit of product A.
3) How should Harrison decide between machine hours and direct labor hours as the cost driver for its manufacturing overhead?

5. The management accountant at Morrison, Inc. provided the following estimated costs for producing 2,500 units of a specialty product manufactured by the firm:

Direct Materials	$10,000
Direct Labor (1 hour per unit)	5,000
Unit-level support costs	10,000
Batch level support costs	5,000
Product-level support costs	3,000
Facility-level support costs	7,000

The company believes that direct labor hours are the most appropriate cost driver for assigning overhead costs to its product.

Required:

1) Compute the predetermined overhead rate for this company.
2) Compute the specialty product's total estimated cost per unit.
3) Why do firms assign overhead costs using a predetermined overhead rate instead of assigning actual costs?

6. Old Virginia Meat Processing Plant processes hogs to produce three joint products: bacon, sausage, and pork chops. The company incurs common processing costs of $100,000 per batch. Each batch yields 15,000 pounds of bacon, 18,000 pounds of sausage, and 7,000 pounds of pork chops. Pork chops can be sold for $3.00 per pound. The bacon and sausage products are sold at the split-off point for $3.25 per pound and $3.50 per pound, respectively.

Required:

1) Allocate Old Virginia's joint costs using pounds produced as the allocation base.
2) Allocate Old Virginia's joint costs using the relative sales value at split-off method.
3) Assume that the pork chops are processed further after the split-off point at an additional cost of $4,000 and that joint costs are allocated based on pounds produced. What would be the total cost assigned to pork chops?