

Chapter 3 Questions

1. **Vance and Vane** produces a range of innovative storage units, designed by some of the biggest names in contemporary furniture design. The following is a list of some of the costs incurred by the company:

Wages of factory canteen staff	
Purchase of wood for shelving	
Salespersons' commissions earned on volume of sales achieved	
Wages of factory machine operators	
Marketing campaign expenditure	
Metal brackets for shelving units	
Depreciation of office computer	
Business rates for factory	
Quality inspector's salary	
Royalties paid to designers	
Fire insurance for factory	
Office workers' Christmas party expenses	

Classify each item of expense as one of the following:

- Direct labour
- Direct materials

- Direct expenses
- Indirect production overheads
- Other indirect overheads

2. Wellingborough Cravats produces high quality silk ties. In the month ending 30

November 2010 the company incurs the following costs:

	€
Depreciation of weaving machines	610
Secretarial and administrative salaries	3,373
Silk thread	6,866
Office supplies	861
Presentation packaging for ties	433
Factory supervisors' wages	1,604
Depreciation of office computer	82
Labels for ties	121
Other factory costs	1,080
Advertising	650
Weaving machine operators' wages	6,620
Factory cleaning	260
Repairs and maintenance of factory	676
Selling costs	1,270

Electricity (see note)	1,025
Factory rental and rates	1,665

Note: 80% of the electricity charge relates to the factory and 20% to the office.

Required: rearrange the information given into a cost statement for the month ending 30 November 2010.

3. Zane and Aldiss produces custom-built yachts for the seriously wealthy. The company uses a job costing system to accumulate costs for each yacht built. In the month of June 2010 the company has three yachts at various stages of assembly in its dry dock. Accumulated costs to 1 June 2010 for each yacht are as follows:

	Yacht ref: X0/22	Yacht ref: X0/24	Yacht ref: X0/27
	€	€	€
Direct material	6,625	1,030	1,850
Direct labour	2,070	663	1,200

During June 2010 the following transfers from stores are made:

	Quantity	Value per unit	Job no
Mahogany strip	120 metres	€16 per metre	X0/22
Pine strip	80 metres	€3.50 per metre	X0/24

Metal fixing components	60 units	€0.80 per unit	X0/27
Metal fixing components	84 units	€0.75 per unit	X0/24
Metal fixing components	104 units	€1.00 per unit	X0/22

The value of other sundry materials booked to each job is as follows:

X0/22	€610
X0/24	€52
X0/27	€1,003

The input of the four different grades of direct labour is as follows:

Grade	Number of hours	Job no
4	16	X0/27
	30	X0/22
3	28	X0/24
	106	X0/27
2	88	X0/22
	78	X0/24
1	54	X0/22
	60	X0/27

The total cost to the company of the various grades of direct labour, per hour, is:

Grade 4	€12.50
Grade 3	€10.00
Grade 2	€9.50
Grade 1	€9.00

Required: design a job costing form which records the material and labour costs for each yacht up to the end of June 2010. The form should show an accumulated prime cost total for each yacht at the end of June 2010.

4. Amis Brevel Biscuits has three principal departments in its production process: mixing, baking and packaging. In April 2010 the company incurs the following production overheads which it plans to allocate and apportion as follows between its three departments:

	€	Basis of apportionment
Factory rental and business rates	7,910	Floor area
Factory cleaning	910	Floor area
Supervisory salaries	18,400	No. of employees
Other indirect labour	14,210	Floor area
Electricity	6,560	Actual
Building maintenance	632	Actual
Insurance	1,064	Floor area

Machinery depreciation	370	Machinery net book value
Total	50,056	

The following information is relevant for the apportionment of overheads:

	Total	Mixing	Baking	Packaging
Floor area	7,000 m ²	2,500 m ²	2,500 m ²	2,000 m ² .
Employees	16	6	4	6
Machinery NBV	€14,400	€18,240	€20,040	€6,120
Electricity	€6,560	€2,160	€3,104	€1,296
Building maintenance	€32	€60	-	€72

Required: produce a schedule apportioning the overheads between the three departments (cost centres).

5. Bayleaf Manufacturing and Trading Company produces several kitchen products, one of which is a bayleaf grinder. One bayleaf grinder has a prime cost of €2.20, which includes 10 minutes of direct labour (costed at €7.20 per hour). Each unit uses 15 minutes of machine time.

The company's management accountant has estimated the following totals for the coming financial year, 2011:

Machine hours available in the factory	20,000 hours
Direct labour hours available	40,000 hours
Total production overheads	€120,000

What is the estimated production cost of one bayleaf grinder if:

- a) production overheads are absorbed on the basis of machine hours?
 - b) production overheads are absorbed on the basis of labour hours?
6. Identify and explain the principal reasons why costs reported by English health trusts can vary so significantly between one trust and another.
7. The directors of **JLX bank** are meeting to consider a proposal by the finance director that the bank's call centre operations should be closed down in order to cut costs. He proposes instead to employ call agents who will work in their own homes rather than at a centralised call centre.

Identify the principal potential cost savings that could arise if the finance director's proposal is adopted.

Chapter 3 Answers

1. Vance and Vane

Wages of factory canteen staff	Indirect production overheads
Purchase of wood for shelving	Direct materials
Salespersons' commissions earned on volume of sales achieved	Other indirect overheads
Wages of factory machine operators	Direct labour
Marketing campaign expenditure	Other indirect overheads
Metal brackets for shelving units	Direct materials
Depreciation of office computer	Other indirect overheads
Business rates for factory	Indirect production overheads
Quality inspector's salary	Indirect production overheads
Royalties paid to designers	Direct expenses
Fire insurance for factory	Indirect production overheads
Office workers' Christmas party expenses	Other indirect overheads

2. Wellingborough Cravats

Cost statement for November 2010

	€	€
Direct materials		
Silk thread	6,866	
Labels for ties	121	
Presentation packaging for ties	433	
	<hr/>	7,420
Direct labour		
Weaving machine operators' wages		6,620
Prime cost		<hr/> 14,040
Production overheads		
Depreciation of weaving machines	610	
Repairs and maintenance of factory	676	
Factory rental and rates	1,665	
Electricity (80% x €1,025)	820	
Factory cleaning	260	
Factory supervisors' wages	1,604	
Other factory costs	1,080	
	<hr/>	6,715
Production cost		<hr/> 20,755

Other overheads		
Secretarial and administrative salaries	3,373	
Office supplies	861	
Selling costs	1,270	
Advertising	650	
Electricity for office	205	
Depreciation of office computer	82	
		6,441
Total costs		27,196

3. Zane and Aldiss

Job costing record – June 2010

	Job ref: X0/22	Job ref: X0/24	Job ref: X0/27
	€	€	€
<hr/>			
Direct material			
Brought forward	6,625	1,030	1,850
Mahogany	1,920		
120 x €16			
Pine 80 x €3.50		280	

Metal fixings:

60 x €0.80			48
84 x €0.75		63	
104 x €1.00	104		
Sundry materials	610	552	1,003
Materials carried forward	<hr/> 9,259	<hr/> 1,925	<hr/> 2,901 <hr/>

Direct labour

Brought forward	2,070	663	1,200
Grade 4			
16 x €12.50			200
30 x €12.50	375		
Grade 3			
28 x €10.00		280	
106 x €10.00			1,060
Grade 2			
88 x €9.50	836		
78 x €9.50		741	
Grade 1			
54 x €9.00	486		
60 x €9.00			540
Labour carried forward	<hr/> 3,767	<hr/> 1,684	<hr/> 3,000 <hr/>

Prime cost			
Materials carried forward	9,259	1,925	2,901
Labour carried forward	3,767	1,684	3,000
Prime cost carried forward	13,026	3,609	5,901

4. Amis Brevel Biscuits

	Cost Centre				
	Basis	Total €	Mixing €	Baking €	Packaging €
Factory rental/rates	Floor area	7,910	2,825	2,825	2,260
Factory cleaning	Floor area	910	325	325	260
Supervisory salaries	No. of employees	18,400	6,900	4,600	6,900
Other indirect labour	Floor area	14,210	5,075	5,075	4,060
Electricity	Actual	6,560	2,160	3,104	1,296
Building maintenance	Actual	632	360	-	272
Insurance	Floor area	1,064	380	380	304
Machinery depreciation	Machinery NBV	370	152	167	51
Totals		50,056	18,177	16,476	15,403

5. Bayleaf Manufacturing and Trading Company

a) Overheads absorbed on a machine hours basis:

The overhead absorption rate is : $\frac{\text{€}120,000}{20,000} = \text{€}6$ per machine hour

The production cost of one bayleaf grinder is:

Prime cost	2.20	
Overhead ($\text{€}6.00 \times 15\text{mins}/60 \text{ mins}$)	<u>1.50</u>	
		<u>€3.70</u>

b) overheads absorbed on a labour hours basis

The overhead absorption rate is: $\frac{\text{€}120,000}{40,000} = \text{€}3.00$ per machine hour

The production cost of one bayleaf grinder is:

Prime cost	2.20	
Overhead ($\text{€}3.00 \times 10\text{mins}/60 \text{ mins}$)	<u>0.50</u>	
		<u>€2.70</u>

6. Research has shown that there are substantial differences in costs reported by English health trusts. Reasons for the differences include the followings:
- Variations in cost allocation practices. Not all trusts account for their costs in the same way, and differences may simply arise because similar costs are dealt with differently.
 - Variations in patient length of stay. The length of time a patient stays in hospital tends to be a clinical decision, not an accounting decision. Length of stay may also be influenced by such factors as the availability of social care for the elderly upon leaving hospital. Where social care is plentiful and freely available, average length of stay for the elderly may be reduced, relatively speaking.
 - Variations in clinical practices. Opinions may vary between clinicians as to best practice. Specialists in a clinical discipline in one trust may, for example, favour medical as opposed to surgical interventions, and this decision would have consequences for costs.
7. The principal potential cost savings associated with the finance director's proposal would include:
- Savings on premises costs such as rental, depreciation, heating, lighting, etc.
 - Information technology costs, if employees are required to use their own computer hardware and broadband connection.