

QUESTIONS

Question 1 Amis Brevel Biscuits Limited

Amis Brevel Biscuits Limited has three principal departments in its production process: mixing, baking and packaging. In April 20X2 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 carrying amount
Total	50 056	

The following information is relevant for the apportionment of overheads:

	Total	Mixing	Baking	Packaging
Floor area	7 000 sq. m.	2 500 sq. m.	2 500 sq. m.	2 000 sq. m.
Employees	16	6	4	6
Machinery NBV	£44 400	£18 240	£20 040	£6 120
Electricity	£6 560	£2 160	£3 104	£1 296
Building maintenance	£632	£360	-	£272

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

Question 2 Bayleaf Manufacturing and Trading Company Limited

Bayleaf Manufacturing and Trading Company Limited 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, 20X9:

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?

ANSWERS

Answer 1 Amis Brevel Biscuits Limited

	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

Answer 2 Bayleaf Manufacturing and Trading Company Limited

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 (£6.00 x 15mins/60 mins)	<u>1.50</u>
	<u>£3.70</u>

b) overheads absorbed on a labour hours basis

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

The production cost of one bayleaf grinder is:

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