

A1. PaintCo

1. Why should direct labour hours be used to apportion the overhead?

C: Correct

2. What direct labour rate is to be used to apportion the overheads?

D: Correct

3. How much production overhead should be charged to the customer order?

D: Correct

4. How much production overhead has been recovered in the whole year?

A: Correct

5. How much is the over or under recovery for the year?

C: Correct

A2. Travelbags

1. Reapportion the canteen costs to the machine and assembly departments to the nearest £.

D: Correct

2. Calculate a machine hour rate for the machining department with overheads of £104,000 (to two decimal places)

D: Correct

3. Calculate a machine hour rate for the machining department with overheads of £104,000 (to two decimal places)

B: Correct

4. Calculate the machining overhead costs for a suitcase and a handbag (to two decimal places)

A: Correct

5. Calculate the assembly overhead cost of a suitcase and handbag (to two decimal places)

A: Correct

A3.

1. Apportion power costs to the sweets, chocolate and maintenance departments

A: Correct

2. Apportion rent costs to the sweets, chocolate and maintenance departments

D: Correct

3. Apportion depreciation costs to the sweets, chocolate and maintenance departments

C: Correct

4. Apportion maintenance costs to the sweets and chocolate departments

B: Correct

5. Calculate the departmental rate for the sweets and chocolate departments based on machine hours

C: Correct

A4. Earthenware

£	Cups	Bowls	Basis of apportionment
Supervisory costs	£640,000	£840,000	
Electricity	£270,000 x 60/90 =180,000	£270,000 x 30/90 90,000	Kw
Rent	£120,000 x 3,500/6,000 =70,000	£120,000 x 2500/6,000 =50,000	Floor space
Depreciation	£450,000 x 50,000/90,000 =£250,000	£450,000 x 40,000/90,000 =£200,000	Net book value
Total	£1,140,000	£1,180,000	
Machine hours	2,500	5,000	
Departmental rate	£456 per machine hour	£236 per machine hour	

A5 Lumin

	Glass	Assembly	Canteen	Basis
Departmental total overhead costs	£50,000	£64,000	25,000	
Reapportion canteen overhead costs	$£30,000 \times 5/15$ 10,000	$£30,000 \times 10/15$ £20,000		Re apportion on employees
Total	£60,000	£84,000		
Rate per machine hour	$£60,000 / 21,000$ machine hours = £2.85 per machine hour			
Rate per labour hours		$£84,000 / 8,500$ labour hours = £9.88 per direct labour hour		

A5 Posterprint

1. A direct labour hour rate is the most appropriate method of apportioning the overheads as the operation is labour intensive. 250 direct labour hours are used every year compared to just 40 machine hours.

2.

	£	working
Direct materials	2,400	
Direct labour	1,800	
Overhead	500	£250,000/125,000 = £2 per Direct labour hour £2 x 250 labour hours for batch
Total cost of batch	4,700	

3. Total expenditure recovered = £2 x 115,000 direct labour hours = £230,000
 Total actual overhead expenditure =
£275,000
 Under recovery =
 £45,000

A6. Mount Ltd

1. Using traditional absorption costing, a machine hour rate would be £600 or £6 per picture frame.
 Total overhead cost = (£210,000+£270,000+£360,000)/(400 + 1,000)machine hours.

2.

Activity	Cost pool £	Cost driver	Cost per driver	Custom made	Standard
Purchase	270,000	180 purchase orders	£1,500 per purchase order	£1,500 x 60 =£90,000	£1,500 x120 = £180,000
Set-up	360,000	90 set-ups	£4,000 per set-up	£4,000 x 30 = £120,000	£4,000 x 60 = £240,000
Machine	210,000	1,400 machine hours	£150 per machine hour	400 machine hours x£150= £60,000	1,000 machine hours x£150= £150,000
Total				£270,000	£570,000
Per frame				£27	£5.70

3. The customized frame is significantly more costly using activity based costing (£27 per frame compared to £24 using traditional absorption costing. £600 per machine hour x 4 hours/100 frames per hour) This is due to number of purchases orders per frame (60 per 10,000 customised frame compared to 120 for every 100,000 standard frame), resulting in an average cost of £9 to £1.80 per frame respectively. Similarly, a customised frame costs £12 per set-up, compared to the standard frame of £2.40.

A7.

Activity based costing (ABC) is considered to be a more accurate method of allocating overhead costs. Rather than spreading costs on volume measures, such as direct labour hours, machine hours or the number of products, ABC looks at the activities involved in producing products. This better reflects changes in manufacturing industry cost structures where overhead costs are now a greater proportion of the total cost of a product. Due to increased competition and technological developments, product life-cycles are much shorter and manufacturing processes are more complex. As a result of greater automation, overhead costs have increased and direct labour costs, as a proportion of total product cost, have reduced. ABC attempts to identify activities involved in making a product, thus linking activity with costs. By understanding this cause and effect relationship, managers can identify where costs can be saved