

- 3 Kapoor Limited is a company which has **two** production departments, machining and finishing, and **two** service departments, maintenance and canteen. The following information is available.

The forecast overheads for the year ending 31 March 2015 were as follows.

	\$
Power	32 000
Machine depreciation	28 400
Supervision	28 000
Rent and rates	26 000
Buildings insurance	11 000
Light and heat	9 000

The following additional information is available.

	Machining	Finishing	Maintenance	Canteen
Number of employees	16	24	8	—
Floor area (square metres)	12 000	14 000	3 000	1 000
Net book value of machinery (\$)	140 000	25 000	13 000	2 000
Kilowatt hours	6 000	3 000	2 000	1 000
Maintenance department hours	66%	34%	—	—

REQUIRED

- (a) Apportion the forecast overheads to the **four** departments and re-apportion the service departments' costs to production departments using a suitable basis for each.

	Basis	Total \$	Machining \$	Finishing \$	Maintenance \$	Canteen \$
Power						
Machine depreciation						
Supervision						
Rent and rates						
Buildings insurance						
Light and heat						
Total apportioned overheads						
Reapportionment of canteen						
Subtotal						
Reapportionment of maintenance						
Total						

Additional information

The following information for the year is also provided.

	Machining	Finishing	Maintenance	Canteen
Budgeted machine hours	58 000	8 000	4 000	—
Budgeted direct labour hours	26 000	42 000	12 000	—

REQUIRED

- (b) Calculate an appropriate overhead absorption rate for **each** production department to **two** decimal places.

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Additional information

The actual results for the year ended 30 March 2015 were as follows.

	Machining	Finishing
Factory overheads	\$82 436	\$56 980
Direct labour hours	27 410	41 295
Direct machine hours	56 120	7 310

REQUIRED

- (c) Calculate the under absorption or over absorption of overheads for **each** production department.

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- (d) State **two** reasons for the under absorption or over absorption of overheads, calculated in part (c), for **each** department.

Machining reason 1

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Machining reason 2

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Finishing reason 1

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Finishing reason 2

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- (e) Explain why estimated figures are used to calculate overhead absorption rates.

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Additional information

Kapoor Limited produces a single component. The directors have been asked to prepare a quotation for a customer who requires 150 units of the component. Kapoor Limited requires 45% gross profit on mark-up on this order.

Product information

Direct materials	\$9.40
Direct labour hours – machining	45 minutes at \$8.40 per hour
Direct labour hours – finishing	20 minutes at \$6.60 per hour
Machine hours – machining	30 minutes
Machine hours – finishing	10 minutes

REQUIRED

(f) Calculate the **full** invoice value of the order.

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