

4 EMM is a manufacturing business producing one product, a wooden desk.

The business is contracted to supply 220 desks each week to H Co, a large retailer, at a selling price of \$44 per unit.

The costs incurred by EMM are as follows:

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Direct material	36.00 per unit
Production labour	
Salaries	410.00 per week
Bonus	0.50 per unit
Finishing labour	
Salaries	180.00 per week
Bonus	0.30 per unit
Machine hire	120.00 per week
Administration costs	400.00 per week
Rent and rates	240.00 per week

REQUIRED

(a) Calculate the weekly break-even point in units.

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(b) (i) Define the term ‘margin of safety’.

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(ii) Explain the usefulness of the margin of safety to a business.

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(c) Prepare a weekly profit statement using marginal cost principles.

[3]

Additional information

EMM is concerned about future prospects. It has spare direct labour capacity and the machinery is not being fully utilised.

EMM has been approached by K Limited, a large furniture company, requesting a quotation to supply 80 desks each week. K Limited would require a small design change to the desks, and this would add \$5.40 to the direct material cost. Workers on these desks would receive an additional finishing labour bonus of \$0.20 per unit.

REQUIRED

(d) Calculate the selling price per unit that EMM should quote to K Limited in order to achieve a 20% contribution to sales ratio.

[3]

Additional information

It has been decided to quote a price of \$48 per unit to K Limited.

This work would involve employing extra finishing labour at a weekly salary of \$120 and hiring an additional machine at \$30 per week.

The contract with H Co to produce 220 desks each week would still be continued at a price of \$44 per unit.

EMM has decided to set an annual target profit of \$17 000.

REQUIRED

- (e) Prepare a profit statement for EMM to show the **total** weekly contribution and **total** weekly profit if K Limited accepts the quotation.

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Additional information

K Limited have advised EMM that they will only proceed with the order if they are given 5% settlement discount for paying the account within seven days.

REQUIRED

- (f) Calculate the total weekly profit of EMM if EMM agrees to giving the settlement discount.

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- (g) Advise EMM whether or not the terms proposed by K Limited should be accepted. Justify your answer using **both** financial and non-financial factors.

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- (h) State **two** advantages of cost–volume–profit analysis to management.

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- (i) State **three** limitations of cost–volume–profit analysis.

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