4 T Limited manufactures a single product. The following budgeted information is available.

	Per unit $
Direct materials	8.40
Direct labour	14.50
Other variable costs	2.30
Fixed costs	8.00

Each unit is sold for $36. Budgeted monthly production and sales are 1200 units.

REQUIRED

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

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.... [4]

(b) Calculate the margin of safety:

(i) in units

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.... [1]

(ii) in revenue

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.... [1]

(c) Identify **three** assumptions made when using break-even analysis.

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[3]

Additional information

In January 2021 the company made and sold 1120 units.

REQUIRED

(d) **(i)** Calculate the contribution to sales ratio.

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.... [1]

(ii) Calculate the profit made in January 2021.

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.... [2]

Additional information

In March 2021 a machine fault meant that only 75% of budgeted output could be produced. The directors considered two options.

Option A

1 Reduce normal output by 25%; as a result, materials cost would be affected because trade discount of 20% on bulk orders would not be available. All other costs would remain the same.

2 Buy in units from a competitor at $27.20 per unit. The competitor can supply a maximum of 250 units and will charge $125 for delivering this quantity.

Option B

1 Hire a replacement machine at a cost of $1600 for the month.

2 The replacement machine could make an additional 200 units per month.

3 All other costs would remain the same.

REQUIRED

(e) Calculate the profit for March 2021 for:

(i) Option A

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(ii) Option B

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(f) Advise the directors which option they should choose. Justify your advice by considering **both** options.

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Additional information

Recently a system of budgetary control has been introduced by T Limited. However, there have been concerns that the system has not worked well.

REQUIRED

(g) State **three** limitations of budgetary control.

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2 ....

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[3]