ClassTycoon break-even analysis student worksheet

Work with a partner. Use a calculator and show your calculations on this sheet or separate paper.

A fictional campus print business sells notebooks for $12 each. Monthly fixed costs are $1,200. Variable cost is $4 per notebook sold. Expected monthly sales are 200 notebooks, and monthly capacity is 300. Use US dollars. Assume one product, no inventory changes, and no tax, financing, or other expenses.

During the first five minutes, explain which costs change when one more notebook is sold.

Over the next ten minutes, calculate contribution per notebook, the number of sales needed to break even, and revenue at break-even. Calculate operating profit at 200 sales. Check your answer by subtracting total costs from revenue.

Calculation space ____

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For the next ten minutes, consider a $10 price with expected sales of 240 notebooks. Costs and capacity remain unchanged. Calculate contribution, break-even sales, revenue, and operating profit. How many whole notebooks must sell at $10 to match or exceed the original profit at $12?

Calculation space ____

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Use ten minutes to discuss whether that sales requirement is feasible and whether the forecast supports it. What evidence would justify a different forecast? What might a rival's discount change?

Now suppose a campus event raises monthly fixed costs to $1,500. Keep the $10 price, $4 variable cost, and 300-unit capacity. Calculate break-even sales and profit at 240 sales.

Calculation space ____

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Spend the final ten minutes writing a price recommendation for the original $1,200 fixed-cost case. Show the profit comparison and name evidence that could change your choice.

Recommendation ____

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