Supported preparation: Operations and break-even

International Baccalaureate · IB Diploma · Business Management · HL

Scope and prerequisites

IB business management first assessment 2024. Business research project investigates one real organization through a conceptual lens. The toolkit and change, creativity, ethics and sustainability connect units; HL-only topics remain marked.

Mapped preparation outcomes: ib_business_management_hl.5.1, ib_business_management_ Read the matching native lesson first. Actual approved choices, evidence and final learner work remain separate.

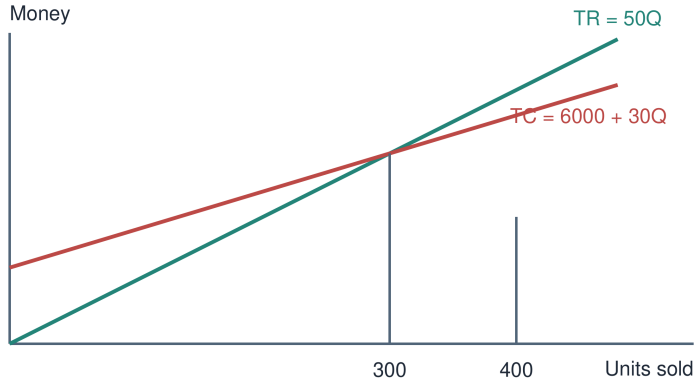
Source vocabulary

contribution ; **margin of safety** .

Explanation and worked method

Job production suits customized work; batch production groups similar jobs; flow production suits repeated standardized output. Location trades access, labour, transport and costs. Break-even uses constant price and variable cost per unit, fixed costs and output sold.

Break-even under constant unit price and cost



Break-even: 300 units. Margin of safety at 400 units: 100.

Task: fixed cost 4,800 units, price 40 units per item, variable cost 24 units per item, expected sales 360 items. Calculate break-even and margin of safety, then evaluate capacity of 280.

Contribution per item=price−variable cost=40−24=16 units/item. Break-even quantity=fixed cost/contribution=4,800/(16 units/item)=300 items. Margin of safety=expected sales−break-even=360−300=60 items. Capacity 280 is below break-even, so the assumed 360 sales are infeasible without changing capacity or costs. HL may examine quality, contingency and information systems; claims require operational evidence.

Independent transfer

Price falls from 40 to 36 while variable cost stays 24 and fixed cost stays 4,800. Recalculate break-even.

Attempt independently before reading the model.

Checked original model

Contribution per item=price−variable cost=36−24=12 currency units/item. Break-even quantity=fixed cost/contribution=4,800/12=400 items. At expected sales of 360, margin of safety=360−400=−40 items; the model predicts a shortfall. Capacity and demand must be checked again.

These are authored formative expectations, not official IB descriptors. Accept other justified arguments with evidence and material limits.

Source and task holds

This supplement teaches the method for this part of the course. The full assessment criteria and any texts your school chooses come from your teacher.