

Solutions

2.1 Contribution per item=price–variable cost= $40-24=16$ units/item. Break-even quantity=fixed cost/contribution= $4,800/(16 \text{ units/item})=300$ 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. Authored points for identifying relevant evidence, explaining a supported inference and a material limit.

3.1 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. Authored points for a relevant judgement, reason tied to the case and justified qualification or method. Accept a supported alternative.