Which Product Actually Contributes to Profit?

Controlling & Management Accounting | Foundation | 45 minutes (estimate) | Fixed and variable costs

Learning outcomes

Separate avoidable economics from allocated overhead. Calculate the result, reconcile it and communicate its limitations.

Method

Contribution is revenue less variable cost. Allocated overhead is an attribution rule, not necessarily a cost that disappears if a product closes. For a discontinuation decision compare contribution lost with fixed cost actually avoided and any credible alternative use of released capacity.

Smaller worked example

A product contributes $8,000 and receives $10,000 allocated overhead. If only $2,000 of overhead disappears on closure, closing it reduces company profit by $6,000 despite its reported loss.

Business context and rules

Fictional Harbor Products, September 2026. A: 1,000 units, price $50, variable unit cost $30; B: 500 units, price $80, unit cost $50; C: 200 units, price $100, unit cost $80. Shared fixed cost is $30,000, allocated A $12,000 / B $10,000 / C $8,000. Only $1,000 fixed cost is avoidable if C closes. C uses 2 machine-hours/unit; A uses 1. A could sell up to 300 extra units if C closes, with no new fixed costs. B demand cannot expand. No other capacity use is available. Ignore taxes and closure costs.

Original synthetic inputs

Input	Value	Unit
A units	1000	units
A price	50	USD / unit
A variable cost	30	USD / unit
B units	500	units
B price	80	USD / unit
B variable cost	50	USD / unit
C units	200	units
C price	100	USD / unit
C variable cost	80	USD / unit
Total shared fixed cost	30000	USD
A allocated fixed cost	12000	USD
B allocated fixed cost	10000	USD
C allocated fixed cost	8000	USD
C avoidable cost	1000	USD
C machine hours/unit	2	hours / unit
A machine hours/unit	1	hours / unit
Extra A demand cap	300	units

Required deliverables

Build contribution and allocated-profit views. Compare keeping C, closing C with idle capacity and closing C with extra A sales. Explain which demand and cost assumptions management must confirm.

Use formulas for derived amounts and preserve source data. Put narrative deliverables in the workbook response area; expand it as needed. Compare amounts within 0.01 of the stated unit and percentages within 0.1 percentage point. No unsupported balancing plugs.