

2.6 Financial planning and break-even

Name: _____ Class: _____ Date: _____ **Total: 13 marks**

KEY WORDS financial plan • fixed cost • variable cost
• break-even

Objective

Use a simple financial plan to judge whether a new venture can pay its costs and reach break-even.

You must be able to:

- classify fixed and variable costs
- calculate revenue, total cost, and profit
- use break-even evidence in a business recommendation

1 Key knowledge and worked examples

■ Plan the numbers

A smoothie stall sells each drink for \$5. Fruit and cups cost \$2 for each drink. Its monthly stall rent is \$300.

- **Revenue** from 100 drinks = $\$5 \times 100 = \500 .
- **Variable cost** = $\$2 \times 100 = \200 .
- **Fixed cost** = \$300.
- Profit = $\$500 - \$200 - \$300 = \0 .

The stall reaches **break-even** at 100 drinks. At break-even, total revenue equals total cost.

2 Practice

2.1 State whether monthly rent is a fixed cost or a variable cost. [1]

2.2 A venture sells 80 drinks at \$5 each. Calculate its revenue. [1]

2.3 The drinks in Question 2.2 cost \$2 each to make and monthly fixed costs are \$300. Calculate profit or loss. [3]

3 Exam-style questions

3.1 A student plans to sell phone cases for \$12 each. Each case costs \$5 to buy. Monthly fixed costs are \$350. Explain why the student should prepare a financial plan before opening. [4]

3.2 The student expects to sell 40 cases in the first month. Use calculations to recommend whether this target is enough to cover the month’s costs. [4]

Solutions

2.1

- Fixed cost.

2.2

- $\$5 \times 80 = \400 .

2.3

- Revenue = \$400.
- Variable costs = $\$2 \times 80 = \160 .
- Profit/loss = $\$400 - \$160 - \$300 = -\60 , so it is a \$60 loss.

3.1

- It estimates sales revenue and costs before money is committed.
- The student can see the number of cases needed to cover fixed costs.
- It can reveal a likely cash or profit problem early.
- The student can change price, costs, or sales targets using evidence.

3.2

- Revenue = $40 \times \$12 = \480 .
- Variable cost = $40 \times \$5 = \200 .
- Total cost = $\$200 + \$350 = \$550$.
- The target is not enough: it gives a \$70 loss, so more sales, a higher price, or lower costs are needed.