Paper 2 Assessment Guide

The quantitative paper, built on unseen stimulus material presented in parts.

ARJUN AGRAWAL
KNOWLEDGE. INSIGHT. IMPACT.

Duration	Marks	Weighting	Formulae
1 h 30 | 1 h 45	**40 | 50**	**35% | 30%**	**Provided**
SL | HL, plus 5 minutes' reading	SL | HL	of the final grade, SL | HL	a copy is given in the examination

For students assessed from May 2024 onwards, under the IB *Business management guide* (first assessment 2024, updated July 2024).

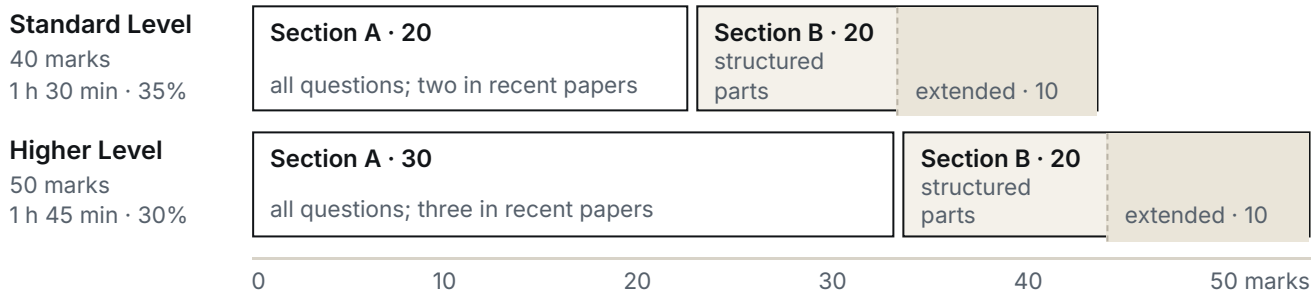
1 How Paper 2 works

How do the SL and HL papers differ, and what am I given in the room?

SL and HL sit different papers that are similar in intent and form. Most questions are quantitative, the stimulus mixes text with tables, charts and infographics, and Section B assesses evaluation (AO3).

The two papers, drawn to scale

■ IB requirement



SL and HL compared

■ IB requirement

	Standard Level	Higher Level
Syllabus	Units 1 to 5, **excluding** HL extension topics	Units 1 to 5, **including** HL extension topics
Section A	All structured questions, 20 marks	All structured questions, 30 marks
Section B	One of two questions (20 marks), each with structured parts and a 10-mark extended response	The same structure, 20 marks
Social enterprise	One Section B option may be set on one	Assessed in Paper 3 instead

From May 2027, *explain* questions in Paper 2 carry 3 marks, or 6 when two things are explained, as in Paper 1 (May 2026 subject report).

How to read the labels

- ■ **IB requirement** IB guide or examiner instructions
- ◆ **Recommended strategy** our technique, not a rule
- ● **Examiner emphasis** IB subject reports
- □ **Illustrative example** invented for this guide

Sources: IB *Business management guide* (first assessment 2024, updated July 2024), assessment outline, markbands and formulae; teacher support material; IB subject reports, May 2024 to May 2026. Kestrel Kayaks and its data are invented for this guide.

This is an independent student resource. It is not published, approved or endorsed by the International Baccalaureate.

2 Reading the unseen stimulus

How do I find the right information, check it, and connect it across parts?

The stimulus is **presented in parts**: you read a part, answer its questions, then read the next. Marks are lost less often through hard arithmetic than through the wrong figure, unit or year.

A reading workflow

◆ Recommended strategy

1 **Read the part**
Who the business is, what is changing, what it must decide.

2 **Decode the question**
Command term, marks, and the exact figure or idea asked for.

3 **Locate the data**
The right table, row, column and year.

4 **Check units and scale**
$ or $000, units or %, a year or a quarter.

5 **Connect the parts**
Earlier figures, and your own earlier answers, as evidence.

Reading a stimulus part

◆ Recommended strategy □ Illustrative example

Part 1 of an invented stimulus

Kestrel Kayaks ❶ builds touring kayaks. Each sells for $500 ❷; variable cost is $300 a kayak and fixed costs are $60,000 a year. Sales have risen steadily ❸ (Table 1). The owners forecast 400 kayaks for 2026 and are considering a lower price to match a new rival ❹.

Table 1	2023	2024	2025
Kayaks sold	340	360	380
Sales revenue ($000) ❺	170	180	190

❶ **Who and what.** The organization, its market and the decision it faces.

❷ **Data you will need.** Prices and costs, each with its unit.

❸ **Change over time.** Describe it with figures: sales rose from 340 to 380 kayaks.

❹ **Pressure and stakeholders.** A rival, customers, owners: who gains and who loses.

❺ **Scale.** $000 means 190 is $190,000. Misreading the scale or the year costs marks.

Connecting the parts

● Examiner emphasis □ Illustrative example

Later questions, above all the extended response, should draw on all the relevant stimulus, not only the paragraph before them (November 2025 report). Your own earlier results count as evidence too.

Part	What it gives you	Where it is used again
Part 1	Price, costs, the sales trend and the forecast	Break-even and margin of safety
Part 2	A rival cutting its price to $450	The price decision in Section B
Part 3	Current assets and liabilities before summer	Liquidity, and the cash flow forecast
Section B	Should Kestrel match the rival's price?	All three parts, and your answers

What you are given in the room

■ IB requirement

The formulae copy

SL and HL: gross profit margin, profit margin, ROCE, current ratio, acid test ratio, ARR. **HL only:** stock turnover, debtor days, creditor days, gearing, NPV, capacity utilization, productivity.

Also

A discount table when an HL question needs one; a four-function calculator is enough. The copy is **not exhaustive**: learn others, such as break-even, margin of safety, payback and working capital.

This is an independent student resource. It is not published, approved or endorsed by the International Baccalaureate.

3 Mastering quantitative questions

How do I turn data into a correct, fully credited answer?

A four-stage pathway

◆ Recommended strategy ☐ Illustrative example

Worked example. Kestrel sells kayaks at $500; variable cost is $300 a kayak, fixed costs are $60,000 a year, and forecast sales are 400 kayaks. **Calculate the margin of safety.**

Stage 1 **Decode** identify what is asked; extract the data	Stage 2 **Set up** select the formula; substitute	Stage 3 **Solve** calculate; present with units	Stage 4 **Interpret** when the question asks
Margin of safety, in kayaks: it needs break-even first. $500, $300, $60,000, 400	Break-even = fixed costs ÷ contribution per unit = $60,000 ÷ ($500 − $300)	= 300 kayaks 400 − 300 = **100 kayaks**	Sales could fall by 100 kayaks, a quarter of the forecast, before Kestrel makes a loss.

Check: 60,000 ÷ 200 = 300; 400 − 300 = 100, a quarter of the forecast.

Presenting a numerical answer

● Examiner emphasis ☐ Illustrative example

Calculate Kestrel's profit margin for 2025. Profit before interest and tax was $16,000 and sales revenue was $190,000.

Formula	Profit margin = profit before interest and tax ÷ sales revenue × 100
Substitute	= $16,000 ÷ $190,000 × 100
Working	= 8.421...
Answer	**Profit margin = 8.42%**

The own figure rule

● Examiner emphasis

If a later part uses an earlier answer that was wrong, examiners can still credit a correct method, **but only if your working shows the figure you used** (TSM; May 2025 report).

With working	$60,000 ÷ $250 = 240 kayaks: the method can be credited
Without	240 kayaks: nothing to trace, so nothing to credit

Here contribution was wrongly found as $250 in an earlier part.

Where calculation marks are lost

● Examiner emphasis

Problem	What subject reports describe	Instead
Units and scale	Missing $ or % signs; a missing % has scored zero	Write the unit with every answer
Rounding	Rounding too early, or to the wrong place	Two decimal places unless told; round time periods up
Percentages	A rise from 20% to 25% called a 5% increase	5 percentage points, or a 25% increase
Working	Only the final figure written where working was required (May 2026)	*Calculate* means showing the relevant stages
Formula	Wrong denominator; total present value given as NPV, or one year's depreciation for the total (both HL)	Write the formula before substituting

This is an independent student resource. It is not published, approved or endorsed by the International Baccalaureate.

4 From calculation to evaluation

How does a correct number become a business judgement?

Four levels of response to one figure

■ IB requirement □ Illustrative example

At the end of May 2026, Kestrel's current assets are $72,000 and its current liabilities $80,000, just before its summer season.

Calculate	Comment	Explain	Evaluate
AO4 · the figure	AO2 · what it shows	AO2 · why it matters	AO3 · so what, overall
$72,000 ÷ $80,000 = 0.90 : 1	Below 1: current assets would not cover current liabilities.	Summer stock was bought on credit, so suppliers may need paying before kayaks sell.	A seasonal strain, not a crisis, if summer sales meet the forecast: arrange an overdraft now.
The number	Its meaning	Its cause and consequence	A weighed judgement

The 10-mark extended response

■ IB requirement ◆ Recommended strategy

Evidence
Figures from across the stimulus, and your own results

Theory
Tools that explain why the figures matter

Stakeholders
Who gains, who loses, and by how much

→

Weighing
Which effects matter most? Compare size, likelihood and timing, and say what the data cannot show.

→

Justified conclusion
A decision where the question asks for one, and the condition it depends on.

The 9 to 10 markband requires an explanation of the limitations of the stimulus material. Subject reports (May 2024, November 2024) state that without it, marks are limited to 8 out of 10. A judgement is needed when the question asks you to choose; a *discuss* question needs a supported conclusion (May 2024, May 2026).

A number is not an evaluation

□ Illustrative example

Discuss whether Kestrel should cut its price from $500 to $450 to match the rival. [10]

Calculation only	"At $450, break-even rises to 400 kayaks, so Kestrel should not cut its price." Correct, but with no theory, no stakeholders and no weighing.
Evidence	Contribution falls from $200 to $150 a kayak, so break-even rises from 300 kayaks to 400: the whole forecast.
Theory	Target profit output: ($60,000 + $20,000) ÷ $150 = 534 kayaks to keep this year's forecast profit, a third more than forecast.
Stakeholders	Customers gain $50; owners lose their safety margin; staff hours depend on volume.
Weighing	Nothing in the stimulus shows whether customers would switch for $50, so the volume gain is uncertain while the lost margin is certain.
Conclusion	Hold the price and compete on quality, unless a trial shows sales can approach 534 kayaks.

This is an independent student resource. It is not published, approved or endorsed by the International Baccalaureate.

5 Constructions and readiness

What does a fully credited construction look like? Each example uses Kestrel's figures.

Four constructions, in IB format

■ IB requirement □ Illustrative example

Statement of profit or loss

Kestrel Kayaks, year ended 31 December 2025	$
Sales revenue	190,000
Cost of sales	(114,000)
Gross profit	**76,000**
Expenses	(60,000)
Profit before interest and tax	**16,000**
Interest	(2,000)
Profit before tax	**14,000**
Tax	(3,500)
Profit for period	**10,500**
Dividends	(4,000)
Retained profit	**6,500**

The IB layout: brackets for deductions and a subtotal at each stage. Cost of sales: 380 kayaks × $300.

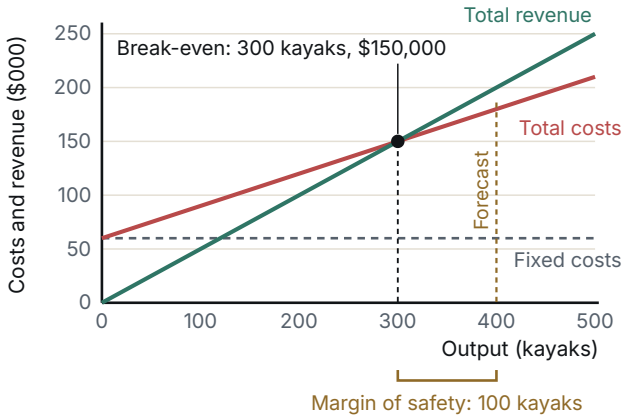
Cash flow forecast

All figures in $000	June	July	August
Opening balance	4	(12)	18
Cash sales revenue	30	60	45
Total cash inflows	**30**	**60**	**45**
Payments to suppliers	36	20	18
Wages, with seasonal staff	8	8	8
Rent and other costs	2	2	2
Total cash outflows	**46**	**30**	**28**
Net cash flow	**(16)**	**30**	**17**
Closing balance	**(12)**	**18**	**35**

Each closing balance opens the next month. June's $12,000 deficit needs an overdraft or later supplier payments.

Break-even chart

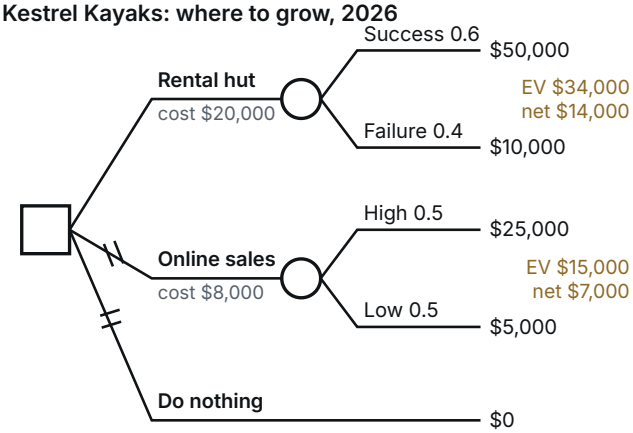
Kestrel Kayaks: break-even chart, 2026



A title, labelled axes with units, a proportional scale, named lines, and break-even and margin of safety marked. Without a correct scale, line marks are unavailable (reports).

Decision tree

Kestrel Kayaks: where to grow, 2026



Square: decision · circle: chance · double stroke: rejected option

Hut: 0.6 × $50,000 + 0.4 × $10,000 = $34,000, less $20,000 cost = $14,000. Online: $15,000 less $8,000 = $7,000. The hut has the higher expected value, but a 40% chance of a $10,000 net loss.

Before you hand in

◆ Recommended strategy

- ☐ Formula, substitution, working, unit.
- ☐ One rounding, at the end.
- ☐ Every *comment* says what the figure means.
- ☐ Constructions in IB format, labelled.
- ☐ Section B uses your own results.
- ☐ A limitation explained; a justified conclusion.

This is an independent student resource. It is not published, approved or endorsed by the International Baccalaureate.