PraktiFin Investment: Student User Guide

Nov 24, 2026 · @FAHMI RAHIM

What the app is

Open the app at **fahmirahim0.github.io/praktifin/investment** on a laptop, iPad or phone. Nothing to install, and you always get the latest version.

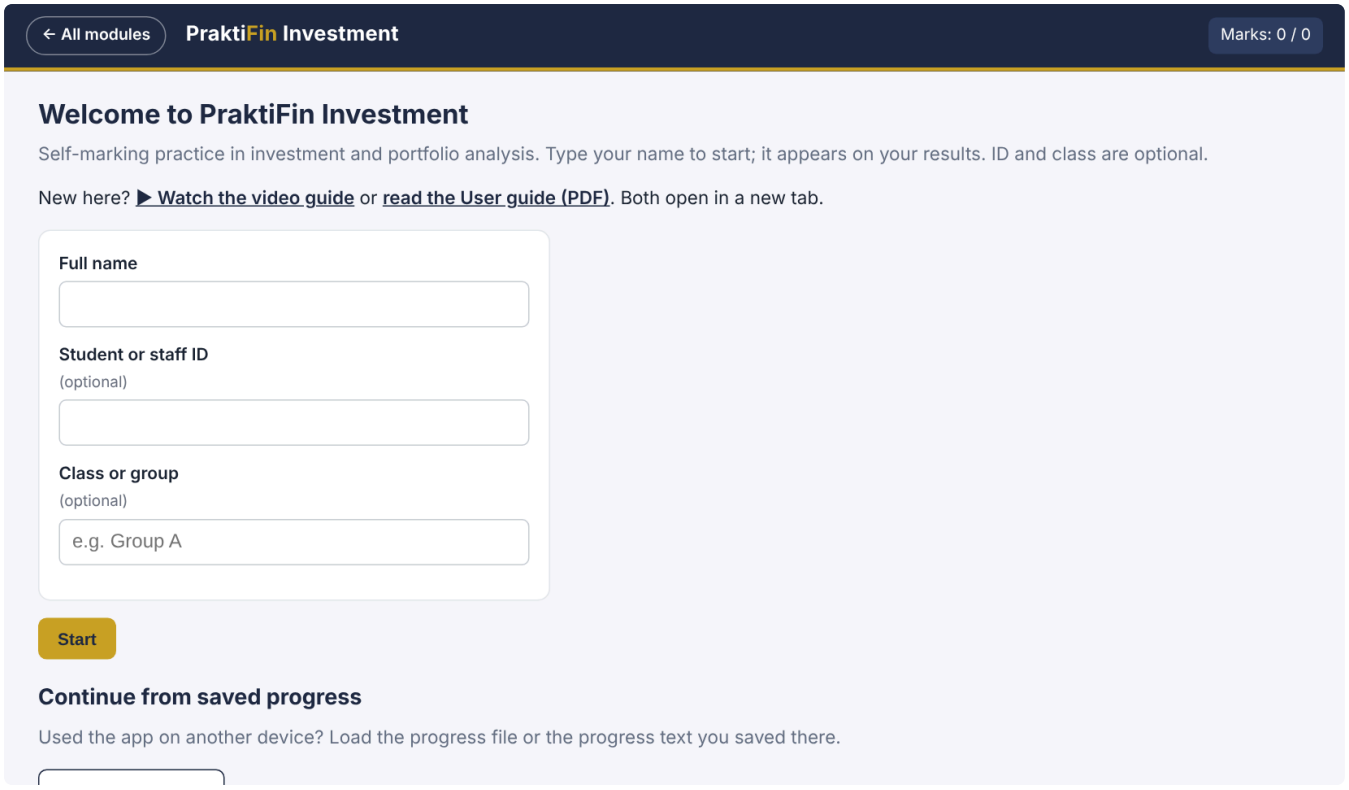
PraktiFin Investment is self-marking practice in investment and portfolio analysis. It follows the step methods taught in Malaysian university investment courses, with Malaysian examples throughout. It is one module of **PraktiFin**, a family of practice apps for finance courses. It was developed at UiTM by Fahmi Abdul Rahim (lead developer), Amirudin Mohd Nor, Nur Hafidzah Idris, Rohaiza Kamis, Faezah Othman and Mohd Hafiz Bakar, Faculty of Business and Management, UiTM Cawangan Melaka; the content follows the course syllabus.

- **All 12 chapters** are open, from the securities market to performance measurement.
- **Every question is new.** None is copied from your tutorial packs, so the app is extra practice, not the tutorial answers.
- **Every subtopic has 25 bank questions**, and the app keeps making new ones after that, so you never run out.
- All companies, funds, people and brokers in the questions are fictional.

Getting started

Sign in once with your name. Your ID and class are optional.

1. Open fahmirahim0.github.io/praktifin/investment in Safari, Chrome or Edge. On an iPad or phone, always use this link: a downloaded HTML file will not run there.
2. Type your **full name** (at least 3 characters).
3. Type your **student or staff ID** if you want it on your results (optional, any format).
4. Type your **class or group** if your lecturer asks for it (optional), for example Group A.
5. Press **Start**.



Your name, plus your ID and group if you typed them, appear in the bar at the top. Use **Edit** to correct them. On a shared or lab computer, press **Not you? Start as a new student** before you begin; it clears the previous student's progress in that browser.

Save your progress online (recommended)

On the website you can save your levels and results online, so they follow you to any phone, iPad or laptop. You need your **student ID** (6 to 14 letters or digits) and a **PIN** of 4 to 6 digits.

1. On the welcome screen, type your name and student ID, then choose a **PIN**. The first time, this creates your account; on another device, type the same ID and PIN.
2. Tick the **research** box only if you agree; it is optional and you can change it later.
3. Press **Start**. A green strip at the top says **Saved online** and when it last saved.

Your name is not sent. Your student ID is stored only in coded form, and your working paper stays on your device. Without an ID, or if you tick **Do not save online**, the app works as before and keeps everything on this device. Already practising without an account? A yellow box on the home page lets you save online with a PIN; **Not now** hides it for the day. In the green strip, **Account** lets you change the research choice or sign out on that device.

Forgot your PIN? Ask your lecturer to reset it; your next sign-in sets a new PIN and your progress is kept. After 8 wrong PINs the account locks for 15 minutes.

If you tick the research box, the app also records, for research only, how long you spend on each question before your first check, and whether you used your second try, Show full answer or Copy for AI tutor. Without research consent these are not sent.

Moving from another device or link? On the welcome screen, use **Continue from saved progress** and load your progress file or pasted text (see *Saving progress* below).

Install it as an app (optional)

On the website you can install PraktiFin Investment like an app. It gets its own icon, opens full screen and still works without internet. When you are online it always loads the latest version. After you sign in, press **Install app** in the bar at the top and follow the steps for your device:

- **iPad or iPhone (Safari):** tap the Share button (square with an arrow), then **Add to Home Screen**, then **Add**.
- **Android (Chrome):** tap **Install now** if you see it, or open the ⋮ menu and choose **Install app**.
- **Laptop (Chrome or Edge):** press **Install now**, or click the install icon at the right end of the address bar.

iPad and iPhone: the home-screen app keeps its own storage, separate from Safari. If you have already practised in Safari, press **Save progress** there first and copy the progress text, then open the new app and use **Continue from saved progress**.

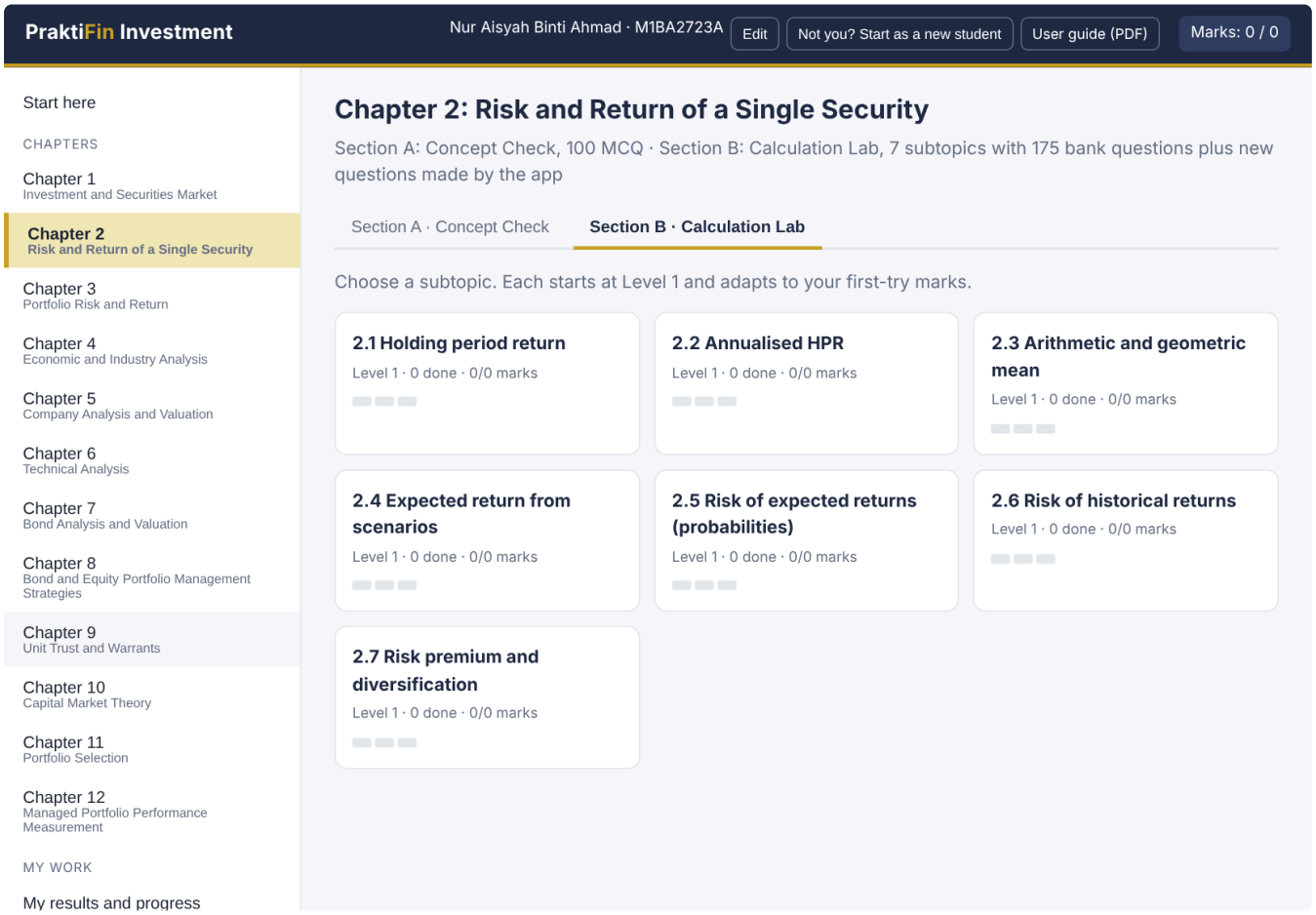
The screen and the two sections

Every chapter has two sections: Section A tests the concepts, Section B tests how you apply them in cases.

Pick a chapter in the left menu. The chapter page has two tabs:

Section	What you get	Marking
A · Concept Check	100 MCQ in 10 quizzes of 10: five *Understanding* quizzes (concepts, definitions, differences) and five *Application* quizzes (scenarios and interpretation)	Each quiz out of 10, on your first check
B · Calculation Lab (Chapters 1 to 3, 5 and 7 to 12)	Case questions for every calculation subtopic	Each question out of 10

Section	What you get	Marking
B · Case Analysis Lab (Chapters 4, 6)	The same kind of cases, but every answer is a choice: classify, interpret, decide or recommend. Chapter 6 cases include charts drawn by the app	Each question out of 10



Section B questions come as different documents: a case study, an email, chat messages, a news clipping, an analyst note, meeting minutes, a broker screen or a phone call. The facts and the method are the same; only the way the story is told changes, as in real work.

My results and progress (left menu, under *My work*) shows every item you have checked, your first-try marks and your history.

Levels: how the next question is chosen

You start every Section B subtopic at Level 1, and your first-try mark moves you up or down. You can also choose a level yourself.

Level	Calculation Lab	Case Analysis Lab
1	Direct calculation, set out as a case study with tables	Classify or identify one item at a time
2	Work backwards to a missing figure, or calculate and then decide; figures in a table inside a document	Read several signals together and draw a conclusion
3	Find the mistake in someone's working, or a multi-step case; figures often hidden in the text	Recommend a course of action, or find the flaw in someone's analysis

After you check a question, press **Generate next question**. It unlocks only after you check, so you cannot skip.

- **8 or more twice in a row:** up one level.
- **4 or less:** down one level.
- **5 to 7:** stay at the same level.

The 25 bank questions at your level come first. When they run out, the app makes new ones at that level. Each question has a code such as **2.1-07** (bank) or **2.1-G2-48213** (generated). The same code always opens the same question, so you can tell your lecturer or classmates exactly which one you mean.

Choose a level yourself. If Level 1 feels too easy, press **Level 2** or **Level 3** under *Choose a level*, in the panel above the question. If you have not checked the current question yet, it is swapped for one at the new level; otherwise your next question comes at that level. The usual rule then carries on, so a mark of 4 or less moves you down again.

Answering and marking

Your first check gives your mark; after that the app teaches you the method.

Read the Required list. Each question lists what to find as a), b), c). Each box below it is one of those items, with its marks shown, and the marks add up to 10.

Keying in numbers

You see	Type	Accepted
A percentage box	12.5 for 12.5% (not 0.125)	about ±0.02
A ringgit box	1250.40, 1,250.40 or RM1,250.40	±RM1 for totals; ±0.01 or ±0.005 for prices and fees

You see	Type	Accepted
A negative answer	a minus sign, for example -3.25	as above
A box asking for 4 dp or 3 dp	that many decimal places	shown on the box

Round to 2 decimal places unless the box says otherwise. Choice boxes are buttons: tap one.

2.1-01 Level 1 Case **A falling price but a dividend**

Cik Aina holds shares in Dataran Hijau Bhd, listed on Bursa Malaysia. The details for the past year are below.

Item	RM per share
Purchase price (start of year)	11.05
Dividend received during the year	0.72
Market price now (end of year)	10.77

Required:

a) Calculate the price change, $P_1 - P_0$.
b) Calculate the total gain per share.
c) Calculate the capital-gain yield.
d) Calculate the dividend yield.
e) Calculate the holding period return.

a) Price change, $P_1 - P_0$ (RM per share) [2 marks]

-0.28 RM

✔ Correct

b) Total gain per share (RM) [2 marks]

1.44 RM

✘ Total gain = $(P_1 - P_0) + D$, per share.

Why was I wrong? Method or inputs
Recheck which formula this box needs and each input you put into it. Compare your steps with the worked answer, one step at a time.

c) Capital-gain yield (%) [2 marks]

-2.53 %

✔ Correct

d) Dividend yield (%) [1 mark]

7.52 %

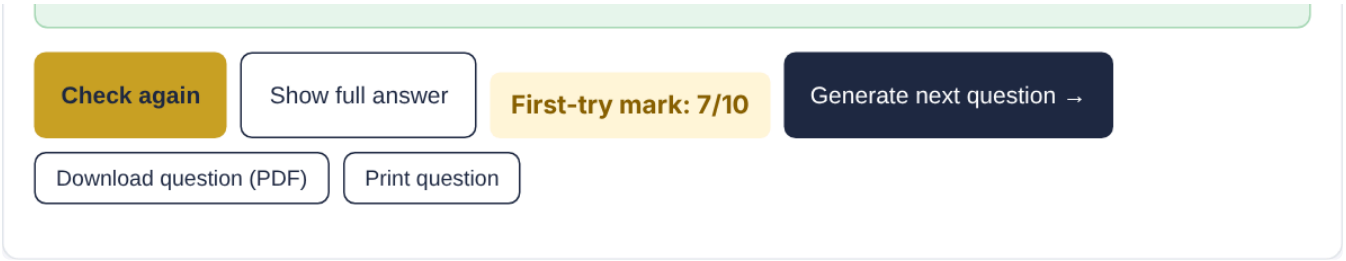
✘ Dividend yield = $D \div P_0$, not $D \div P_1$.

Why was I wrong? Method or inputs
Recheck which formula this box needs and each input you put into it. Compare your steps with the worked answer, one step at a time.

e) Holding period return (%) [3 marks]

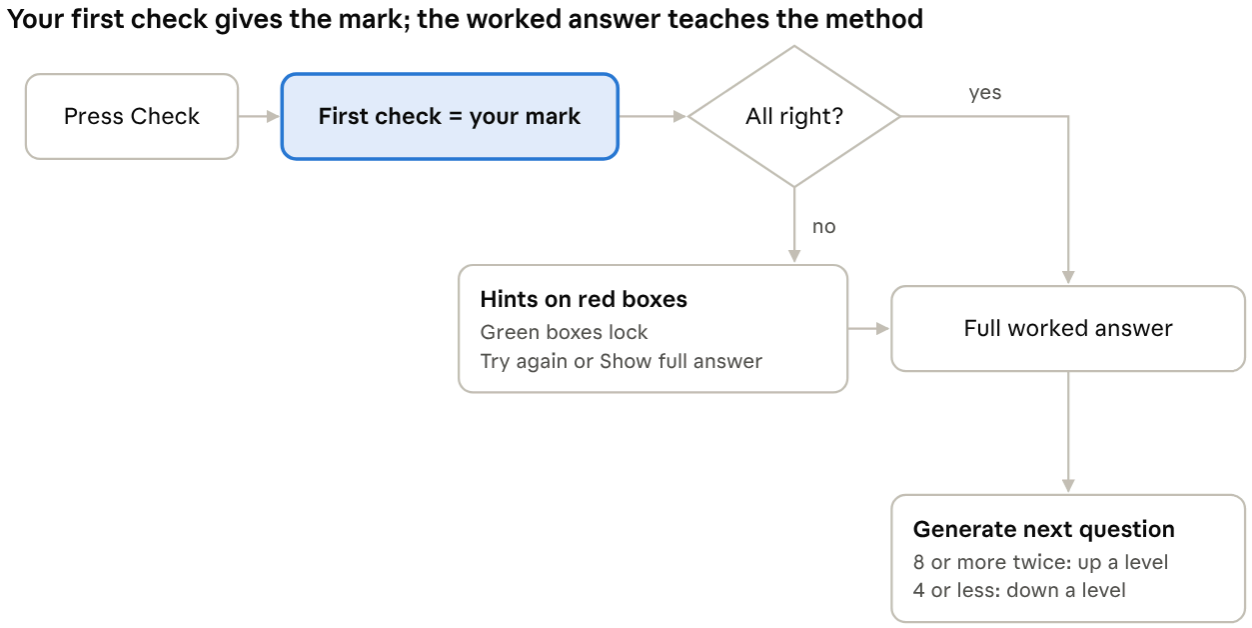
3.98 %

✔ Correct



When you press Check

1. Your **first check gives your mark** out of 10.
2. Correct boxes turn green and lock. Wrong boxes turn red and show a hint.
3. You get **one more try**, or press **Show full answer**.
4. The **Full worked answer** shows every step, with the correct figure under each box you got wrong.



checking and marks · from Check to the next question

The mark is fixed at your first check; the second try and the worked answer are for learning, and the level rule uses only first-try marks.

When an answer is wrong: Why was I wrong? Under every red box a yellow note names the most likely mistake, for example *Percent vs decimal*, *Sign (+/−)*, *Period (annual vs semi-annual)*, *Variance vs standard deviation*, *Left out or added an item*, *Rounded too early* or, in Chapters 4 and 6, *Opposite reading*. During your second try the note gives no correct figures, so you still have to find the fix yourself. After the question is finished, and in review, it also shows the figures.

d) Dividend yield (%) [1 mark]

0.0652 %

✘ Dividend yield = D ÷ P_0, not D ÷ P_1.

Why was I wrong? Percent vs decimal
You entered a decimal. Percentage boxes take the number of percent: type 12.5 for 12.5%, not 0.125.

e) Holding period return (%) [3 marks]

-3.9819 %

✘ HPR = (P_1 − P_0 + D) ÷ P_0. Always divide by the beginning price.

Why was I wrong? Sign (+/−)
The size is right but the sign is reversed. Ask: is this a gain or a loss, an inflow or an outflow, above or below?

Discuss it with a free AI tutor. When a question is finished (and in review) a purple card sits above the worked answer. Press **Copy for AI tutor**: it copies the question, your answers and the full worked answer, with no name or ID. Then open ChatGPT, Gemini, Copilot or Claude (all have free versions), paste, and ask about the step you do not understand. The app sends nothing by itself. AI can still make mistakes: if it disagrees with the worked answer, the worked answer wins.

Working paper (iPad and tablet). Between the Required list and the answer boxes there is a lined *Working paper*. Write your working there with Apple Pencil or a stylus, then key in your answers below it.

- **Pencil writes, finger scrolls.** If you have no pencil, press **Write with finger: Off** to turn it on; press it again to scroll with your finger. On a laptop, write with the mouse.
- **Pens:** black, blue, red, green and purple, thin or thick, plus **Eraser**, **Undo** and **Clear** (tap twice to clear).
- **+ Add more paper** makes the page longer. **Save as image** saves your working as a picture.
- Your working is **saved with the question on this device**, so it comes back when you open the question again in *My history*. The newest 30 questions are kept. It is not included in Save progress.
- Do not need it? Press **Hide**; the app remembers your choice.

Report a problem. If a question looks wrong or unclear, press **Report a problem** on the question card, choose what is wrong and add a short note. If you save online, the report goes to your lecturer with your progress. If not, the app shows the report as text for you to send to your lecturer, for example by WhatsApp.

Financial calculator first. Where the lecture uses the BA II Plus (bond valuation, yields, and the dividend models in Chapter 5), the worked answer shows *Method 1: BA II Plus* keystrokes first, then *Method 2: Formula*. Practise with your calculator.

Charts (Chapter 6). Read the chart in the question: compare peaks and troughs, where the last close sits against the dashed lines, and which moving average is on top. No calculation is needed.

Chapter by chapter

All 12 chapters are open, with 80 Section B subtopics between them.

Chapter	Section B	Subtopics
1 Investment and Securities Market	Calculation Lab	Required rate of return; IPO proceeds, public spread and listing tests; trading costs and break-even; market indices; bonus issue, split and consolidation; rights issue and TERP
2 Risk and Return of a Single Security	Calculation Lab	Holding period return; annualised HPR; arithmetic and geometric mean; expected return; risk with probabilities; risk of historical returns; risk premium and diversification
3 Portfolio Risk and Return	Calculation Lab	Portfolio expected return; covariance and correlation (historical); covariance and correlation (probabilities); two-asset risk; minimum-variance portfolio; three-asset risk; single index model

Chapter	Section B	Subtopics
4 Economic and Industry Analysis	Case Analysis Lab	Economic indicators; business cycle and sector rotation; monetary and fiscal policy; industry life cycle; cyclical and defensive industries; competitive forces and structural influences
5 Company Analysis and Valuation	Calculation Lab	DuPont; forecasting EPS, dividends and growth; preference shares; Gordon model; multi-stage growth and holding period; FCFE; P/E and relative valuation
6 Technical Analysis	Case Analysis Lab	Market efficiency; technical analysis and Dow Theory; trend, support and resistance; chart patterns; moving averages and crossovers; momentum oscillators; volume, breadth and sentiment
7 Bond Analysis and Valuation	Calculation Lab	Bond valuation; zero-coupon and perpetual sukuk; current yield and YTM; callable bonds and YTC; HPR and realised yield; duration; convexity
8 Bond and Equity Portfolio Management Strategies	Calculation Lab	Active return, alpha and fees; tracking error and Active Share; interest-rate anticipation (duration and convexity); immunisation and dedication; contingent immunisation; core-plus and 130/30; strategic, tactical and rebalancing; CPPI
9 Unit Trust and Warrants	Calculation Lab	NAV per unit; sales and repurchase charges; distributions and reinvestment; closed-end funds; company warrants; structured warrants and effective gearing; dilution and exercise decisions

Chapter	Section B	Subtopics
10 Capital Market Theory	Calculation Lab	Capital market line; beta and the risk split; CAPM required return and alpha; portfolio beta and backing out CAPM inputs; APT; one-factor arbitrage
11 Portfolio Selection	Calculation Lab	Utility and risk tolerance; break-even risk tolerance; the complete portfolio and y*; ranking shares; the cut-off rate C*; Z values, weights and ringgit (Simple Sharpe procedure, 4 decimal places)
12 Managed Portfolio Performance Measurement	Calculation Lab	Sharpe, Treynor and Jensen; Treynor and Jensen from returns and betas; Sharpe Index and M^2; Profitability Index; tracking error and the information ratio; which alpha, correlation and data checks

Every chapter also has 100 MCQ in Section A.

Saving progress, results and question PDFs

Your progress lives only in the browser you use, so save it before you change device or clear the browser.

If you save online, this happens by itself a few seconds after every check, and you can skip Save progress. The steps below are for students who keep progress on the device only.

Save progress. Open **Save or load progress** and press **Save progress**. The app downloads a progress file and also shows a **Copy progress text** button. On an iPad or phone the download may be blocked: copy the text instead and keep it in Notes, WhatsApp or email.

Load progress. On the welcome screen use **Continue from saved progress**, or open **Save or load progress** after sign-in, then load the file or paste the text. Your name, levels, results and history all come back. A file or text that has been edited is refused.

Results for your lecturer. In **My results and progress**, press **Download results (CSV)** or **Copy results**. The CSV lists every checked item with its first-try mark and level, plus a check code your lecturer uses to confirm it was not edited.

The CSV also lists the **mistake types** for each question you got wrong, so your lecturer can see what to revisit in class.

For lecturers: the class report. Load all your students' CSV files at once into the Class report. It checks each check code, shows the weakest subtopics first, the most common mistake types with a teaching note for each, and the students who may need help. Nothing is uploaded: the files stay in your browser. The link is also in lecturer mode.

For lecturers: class progress online. For students who save online, open **Class progress (lecturer)** (on the welcome screen, or in the lecturer bar) and sign in with the admin key. Paste your class list (ID, name, group); the names stay in your browser. You see each student's Section A and Section B averages, top level and last activity, the weakest subtopics, the most common mistake types, and you can reset a PIN, download a research file (only students who agreed, with no names or IDs) or remove a student's data.

Lecturer mode shows any question with its answers, so it now asks for the lecturer key (the same admin key as Class progress) and works on the website link only. Class progress also lists the questions students reported, newest first.

Download question (PDF) and **Print question.** Every question card has both buttons. Use the PDF to attach a question to your own working in Word or Excel. If no file appears, use Print question, then Save as PDF.

Review and practice copies. From your history you can review your first-attempt answers. **Open a question by its code** gives an unmarked *practice copy* of a question **you have already answered**: it does not change your marks or level. A question you have not answered yet cannot be opened as a practice copy, so first-try marks stay fair for everyone.

Study plan and tips

Work each chapter in the order it is taught: concepts first, then cases, then level up.

1. **After the lecture:** do the Section A *Understanding* quizzes for that chapter.
2. **After the tutorial:** do the *Application* quizzes, then start Section B at Level 1 in each subtopic.
3. **Every week:** aim to reach Level 3 in every subtopic of the chapters covered so far. Level 3 is where test-style reasoning lives.
4. **Before a test:** revisit your weakest subtopics in *My results and progress*, and redo questions by code.

Tips

- Work your steps first, on paper or in the Working paper under the question, then key in your answers. The marks come from your first check.

- Read the hints under red boxes before your second try; they point at the step that went wrong.
- Always open the **Full worked answer**, even when you score 10. The *Why* and *Watch out* notes show the common mistakes.
- In calculation chapters, use your BA II Plus wherever the worked answer shows Method 1.
- Save your progress at the end of every session.

Troubleshooting

Most problems come from using a different browser or device from last time.

Problem	What to do
My progress is gone	Progress is kept per browser and per web address. Use the same browser and link, or load your saved progress file or text.
I used another link or file before, and my progress is not here	Save progress there, then use Continue from saved progress on this link.
Save progress did nothing	On a laptop, check your Downloads folder. On an iPad or phone, use Copy progress text instead.
The downloaded HTML file does not work on my iPad	Use the web link. iPads and phones cannot run local HTML files.
Download question (PDF) did nothing	Use Print question, then Save as PDF.
My correct answer was marked wrong	Check the units (12.5, not 0.125, for 12.5%), the decimal places asked for, and whether a minus sign is needed.
Load progress refused my file	The file or text was changed. Load the original file you saved.
Generate next question is greyed out	Check the current question first.
I do not see the Install app button	It shows only on the website link, after you sign in, and not when the app is already installed. A downloaded HTML file cannot be installed.

Problem	What to do
My progress is not in the installed app (iPad or iPhone)	The home-screen app has its own storage. Save progress in Safari, copy the text, then use Continue from saved progress in the app.
Copy for AI tutor did nothing	Your browser blocked the clipboard. A text box appears: select all of it, copy, and paste it into the AI chat.
My Apple Pencil scrolls the page instead of writing	Use Safari and the website link, and update iPadOS. If it still scrolls, press Write with finger to turn it on, write, then turn it off to scroll.
My finger does not write on the Working paper	By default the finger scrolls. Press Write with finger: Off so it says On.
My working from an older question is gone	Only the newest 30 questions keep their working, and only on the device and browser you wrote it on. Use Save as image for working you want to keep.
Wrong PIN, or the account is locked	After 8 wrong PINs, wait 15 minutes. Forgot it? Your lecturer can reset your PIN; then sign in with a new one and your progress comes back.
The strip says Offline	Your work is safe on this device. It uploads when you are back online, or press Sync now.
I cannot save online	Use the website link (not a downloaded file) and a student ID of 6 to 14 letters or digits, with no - or spaces. Fix it with Edit at the top.

Still stuck? Tell your lecturer the question code shown at the top of the question card.