Build an Integrated Three-Statement Model

Excel & Financial Modeling | Intermediate | 90-120 minutes (estimate) | Accrual accounting and P&L / balance sheet / cash flow

Worked numerical schedule

Measure	Value	Unit
COGS	300.00	USD
EBITDA	100.00	USD
EBIT	80.00	USD
Pretax income	70.00	USD
Tax expense and cash paid	17.50	USD
Net income	52.50	USD
Operating cash flow	52.50	USD
Investing cash flow	-40.00	USD
Financing cash flow	-20.00	USD
Closing cash	92.50	USD
Closing net PPE	220.00	USD
Closing debt	130.00	USD
Closing equity	292.50	USD
Closing assets	482.50	USD
Closing liabilities and equity	482.50	USD
Closing balance sheet residual	0.00	USD
Opening balance sheet residual	0.00	USD

Interpretation and recommended actions

Revenue 500 less COGS 300 and operating expenses 100 gives EBITDA 100, EBIT 80, pretax income 70 and net income 52.5. CFO is 52.5, investing cash flow -40 and financing -20; closing cash is 92.5. Closing assets and liabilities plus equity both equal 482.5. Increasing closing AR by 10 reduces cash by 10 and leaves profit unchanged. The balance sheet still balances because one asset replaces another.

Scoring rubric - 100 points

Dimension	Points	Awarding guidance
Calculation	40	Income statement 10; cash flow 15; balance sheet and roll-forwards 15.
Interpretation	25	Correct application of the case rules 10; explain the business decision 10; identify evidence or limitations 5.
Controls / audit trail	20	Traceable formulas 8; independent reconciliation 8; explicit units and signs 4.
Communication	15	Decision and numerical headline 5; actions with owners and evidence 5; concise response covering all required deliverables 5.

Award method credit after an isolated arithmetic error rather than repeatedly deducting for it. Equivalent account labels and well-supported alternative recommendations are acceptable. Numerical tolerance is 0.01 in the stated units; no universal passing score is prescribed.

Common mistakes

Using revenue as receipts; adding capex to depreciation expense; plugging cash; forgetting current profit in equity.

Staged hints

Roll working capital by closing less opening balances. Add depreciation back once. Cash must link from its roll-forward.

Instructor notes

Prerequisites: Accrual accounting and P&L / balance sheet / cash flow. Suggested use of the estimated 90-120 minutes: spend roughly 15% on the lesson and smaller example, 55% on the independent task, 20% on comparing approaches and 10% on the decision discussion. Timing is untested. Ask learners to explain why the numerical check is necessary but not sufficient.

For a simpler class, provide the model structure and work through one driver. For an extension, change one operational assumption and require a new reconciliation and recommendation. Verify the new key before distributing any variant. Open files in the intended spreadsheet application before class. Solutions are learning resources, not secure hiring examinations. Expert review remains pending.