General Mathematics | Units 3–4 | Outcome 1

Iterate a recurrence to find initial asset, investment or loan values over time.

Key skills | Free preview

Learning target: Iterate a recurrence to find initial asset, investment or loan values over time.

An end-period loan repayment follows interest accrual for that period. Track the opening balance, interest, payment, principal reduction and closing balance separately. A recurrence summarises the same calculation. When the remaining balance plus interest is smaller than the usual payment, reduce the final payment instead of allowing a negative loan balance.

Try the mathematics

Task 1. A $2000 loan charges 1% per month and has usual end-month payments of $700. Construct the amortisation table until cleared, keeping unrounded internal values.

Continue with the full worksheet

The complete resource has 2 focused task sets and substantive worked solutions. Use an exercise book or print the A4 worksheet. This preview shows the first task without its full solution.

Find this resource:
https://resources.aspiretopowerlearning.com.au/vce/skills/aspire-internal-gm-u34-o1-aos2-finance-ks-02/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Units 3–4; Outcome 1; Key skills; Recursion and financial modelling; bullet 2; p. 91.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u34-o1-aos2-finance-ks-02. This is an internal identifier, not an official VCAA code.

Free preview: share intact with attribution, without charging. Full resource rights are not included.

Original independent practice. Not published or endorsed by VCAA. The activity is not an official SAC, examination or complete treatment of every clause of a broad curriculum requirement.