



GENERAL MATHEMATICS (UNITS 3&4, ACCELERATED) (YEAR 11) · PRACTICE ASSIGNMENT

Finance and Matrices Practice

RECURSION AND FINANCIAL MODELLING **HARD**

Work through each question in order. Show your working in the space provided where it helps — there's no time limit, just do your best.

- 1

A \$5,000 investment earns 4% p.a. simple interest. Find its value after 3 years.
- 2

Write a recurrence relation for a \$2,000 loan reducing by \$150 each month (ignore interest).
- 3

Given $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$, find $A \times B$.
- 4

Explain what is meant by a "spanning tree" in a network.
- 5

A data set is right-skewed. What does this tell you about the relationship between its mean and median?

TEACHER'S REMARKS

Score: _____ / 5