



NUMBER PATTERNS & RECURSION



•

For each concept you need to tick **one** box in the EXERCISES column and **all three** boxes in the BOUND REFERENCE column.

CONCEPT	EXERCISES	BOUND REFERENCE	Œ
Identifying Number Patterns	<u>Exercise 8 A</u> <u>Entry:</u> 1a→i, 2 , 3 & 5 <u>Expected:</u> 1a→o, 2, 4 & 5 <u>Expected+:</u> 1a→o, 2, 4, 5 & 6	Concept How to Example(s)	
Identifying Arithmetic Sequences	Exercise 8B Entry: 1, 2, 4a→c, 5d→f 7, 8a, 9 & 12 Expected: 1, 3, 4a→c, 6c→f, 7, 8a, 9,10 & 12 Expected+: 1, 3, 4a→c, 6c→f, 7, 8a, 9,11 & 12	Concept How to Example(s)	
Finding and Applying the Arithmetic Sequence	Exercise 8C Entry: 1 abc, 2ace, 3, 5 & 6 Expected: 1 abc, 2ace, 3, 6 & 8 Expected+: 1 abc, 2ace, 3, 6 & 9	Concept How to Example(s)	
Using a Recurring Relation to Generate & Analyse an Arithmetic Sequence	Exercise 8D Entry: 1, 2 & 4 Expected: 1, 2 & 5 Expected+: 1, 2 & 5	Concept How to Example(s)	
Showing and Generating the Geometric Sequences	Exercise 8EEntry: $1a \rightarrow d$, $2a \rightarrow d$, $3abc$, $4ab \& 5a$ Expected: $1a \rightarrow d$, $2a \rightarrow d$, $3def$, $4def \& 5a$ Expected+: $1a \rightarrow d$, $2a \rightarrow d$, $3def$, $4def \& 5$	Concept How to Example(s)	
Applying the Geometric Sequences	Exercise 8F Entry: 1adg, 2ad, 3ace, 4ac, 8ab, 10 & 12ac Expected: 1adg, 2ad, 3ace, 4ac, 8ab,11, 12ad & 14 Expected+: 1adg, 2ad, 3ace, 4ac, 8ab, 11, 13 & 14	Concept How to Example(s)	
Using the recurrence Relation to generate & Analyse a Geometric Sequence	Exercise 8G Entry: 1, 2 & 3 Expected: 1, 3 & 4 Expected+: 1, 2, 3 & 4	Concept How to Example(s)	

Using Recurrence Relations to Model Growth and Decay	<u>Exercise 8H</u> <u>Entry:</u> 1, 3, 5a, 6, 8 & 10	Concept	0
	Expected: 1,2, 3, 5ab, 6, 8, 9 & 10	How to	
	Expected+: 1,2, 3, 5ab, 6, 8, 9 & 10	Example(s)	
The Fibonacci Sequence	<u>Exercise 8I</u> <u>Entry:</u> 1, 2ab, 3ab & 5	Concept	
The Fibonacci Sequence	Expected: 1, 2ab, 3ab, 4 & 5		0