I can find the term to term rule to extend a sequence of numbers.

Find the rule and give the next three terms for each of these sequences: 400, 480, 320, 560, 640, 720, 800, + + + + + + 5650, 5550, 5450, 5350, 5250, 5150, \_ 1365, 1354, 1343, 1332. 1321. 1310. \_ \_ Find the rule and add the missing terms in these sequences. Draw arrows to help you: 4560, 4360, 3960, 3760, 32.1, 32.2, 32.3, 32.5, 25 540, 25 790, 26 040, 26 790 **plan**it Mathematics | Year 6 | Number and Algebra | Patterns and Algebra | Super Sequences | Lesson 1 of 3: What's the Rule? visit twinkl.com.au



## **Super Sequences**

I can find the term to term rule to extend a sequence of numbers.

Find the rule and give the next three terms for ea	ch of these sequences:
--	------------------------

7664,	7904,	8144,	8384,	8624,	8864,	,     -	······································	
Rule:								
546 119,	496 119,	446 119,	396 119,	346 119	, 296 119,	,		
Rule:								
345.5,	345.8,	346.1,	346.4,	346.7,	347,	,	,	
Rule:								
79 101,	78 801,	78 501,	78 201,	78 901,	77 601,	,	,	
Rule:								
Add the r	nissing te	rms in the	se sequen	ces:				
456 100,	45	6 950,		,	458 650,	459 500	) <b>,</b> .	
Rule:								
19.32,		,	18.32,		17.82,	17.32,		
Rule:								
12 400,	12	750,		-,	,	13 800	,	14 150
Rule:								
567,		,	4367,		,	8167,		10 067
Rule:								





I can find the term to term rule to extend a sequence of numbers.

Find the missing terms from these three sequences. Write the terms of each sequence in the correct place in the Venn diagram.

Sequence 1: 457.75,, 459.25,, 460.75,	Rule:
Sequence 2: 120,,, 1140,, 1820	Rule:
Sequence 3:, 38 720,, 19 590, 10 025,	Rule:

These numbers show terms that would appear in the above sequences if you continued to extend them. Place them in the correct place in the Venn diagram. Be careful: some of the numbers are not found in any of the sequences!

412.5	463
2160	360
-10 823	69 310
2840	-9105
57 850	466



## **Super Sequences - Answers**

I can find the term to term rule to extend a sequence of numbers.

Find the rule and give the next three terms for each of these sequences:



Find the rule and add the missing terms in these sequences. Draw arrows to help you:

4560,	4360,	<u>4160,</u>	3960,	3760,	3560
32.1,	32.2,	32.3,	32.4,	32.5,	32.6
25 540,	25 790,	26 040,	26 290,	<u>26 540,</u>	26 790



Mathematics | Year 6 | Number and Algebra | Patterns and Algebra | Super Sequences | Lesson 1 of 3: What's the Rule?

## **Super Sequences – Answers**

I can find the term to term rule to extend a sequence of numbers.

Find the	rule and giv	ve the nex	t three terr	ms for each	n of these s	sequences:		
7664,	7904,	8144,	8384,	8624,	8864,	9104,	9344,	9584
Rule: <b>+24</b>	0							
546 119,	496 119,	446 119,	396 119,	346 119,	296 119,	<u>246 119,</u>	<u>196 119,</u>	146 119
Rule: <b>-50</b>	000							
345.5,	345.8,	346.1,	346.4,	346.7,	347,	347.3,	347.6,	347.9
Rule: <b>+0.</b> 3	3							
79 101,	78 801,	78 501,	78 201,	77 901,	77 601,	<u>77 301,</u>	<u>77 001,</u>	76 701
Rule: <b>-30</b>	0							
Add the r	missing ter	ms in these	e sequence	?S:				
456 100,	45	6 950,	<u>457 80</u>	<b>0,</b>	158 650,	459 5	00,	460 350
Rule: <b>+85</b>	0							
19.32,	32, <b>18.82,</b>		18.32,		17.82,	17.3	32,	16.82
Rule: <b>-0.</b>	5							
12 400,	12	750,	13 100	),	13 450,	13 8	00,	14 150
Rule: <b>+35</b>	0							
567,	246	57,	4367,		6267,	816	7,	10 067

Rule: +1900



## Super Sequences – Answers

I can find the term to term rule to extend a sequence of numbers.

Find the missing terms from these three sequences. Write the terms of each sequence in the correct place in the Venn diagram.

Sequence 1:	457.75,	458.5,	459.25,	460,	460.75,	461.5	Rule:	+0.75
Sequence 2:	120,	460,	800,	1140,	1480,	1820	Rule:	+340
Sequence 3:	48 285,	38 720,	29 155,	19 590,	10 025,	460	Rule:	-9565

These numbers show terms that would appear in the above sequences if you continued to extend them. Place them in the correct place in the Venn diagram. Be careful: some of the numbers are not found in any of the sequences!

412.5	463
2160	360
-10 823	69 310
2840	-9105
57 850	466





Mathematics | Year 6 | Number and Algebra | Patterns and Algebra | Super Sequences | Lesson 1 of 3: What's the Rule?