



# Term to Term Rule



REVISE THIS TOPIC

CHECK YOUR ANSWERS



1 The term-to-term rule for a sequence is



Multiply by 2 then add 3

The first term of the sequence is 1

1 (a) Work out the second term of the sequence. [1 mark]

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Answer \_\_\_\_\_

1 (b) Work out the third term of the sequence. [1 mark]

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Answer \_\_\_\_\_

1 (c) Work out the fourth term of the sequence. [1 mark]

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Answer \_\_\_\_\_





2 (a) The term-to-term rule for a sequence is

Subtract 4 and then divide by 2

The first term of the sequence is 24

Work out the third term of the sequence.

[2 marks]

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Answer \_\_\_\_\_

2 (b) The term-to-term rule for a different sequence is

Multiply by 5 then add 1

The second term of the sequence is 46

Work out the first term of the sequence.

[2 marks]

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Answer \_\_\_\_\_





3 (a) The term-to-term rule for a sequence is

Add 4 then multiply by 3

The first term of the sequence is 3

Work out the third term of the sequence.

[2 marks]

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Answer \_\_\_\_\_

3 (b) The term-to-term rule for a different sequence is

Subtract 1 then divide by 2

The second term of the sequence is 9

Work out the first term of the sequence.

[2 marks]

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Answer \_\_\_\_\_

Turn over ►





4 (a) The term-to-term rule for a sequence is

Divide by 2 then add 10

The first term of the sequence is 30

Work out the third term of the sequence.

[2 marks]

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Answer \_\_\_\_\_

4 (b) The term-to-term rule for a different sequence is

Add 5 then multiply by 10

The third term of the sequence is 750

Work out the first term of the sequence.

[3 marks]

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Answer \_\_\_\_\_





5 The term-to-term rule for a sequence is

Multiply by 5 then subtract 4

The second term of the sequence is 11

5 (a) Work out the first term of the sequence. [2 marks]

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Answer \_\_\_\_\_

5 (b) Work out the third term of the sequence. [1 mark]

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Answer \_\_\_\_\_

5 (c) Work out the fourth term of the sequence. [1 mark]

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Answer \_\_\_\_\_

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Turn over ►





6 The term-to-term rule for a sequence is

Add  $k$

The first term of the sequence is 11  
The third term of the sequence is 37

Work out the value of  $k$ .

[2 marks]

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$k =$  \_\_\_\_\_

7 The term-to-term rule for a sequence is

Subtract  $m$

The first term of the sequence is 16  
The fourth term of the sequence is  $-5$

Work out the value of  $m$ .

[3 marks]

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$m =$  \_\_\_\_\_





8 The term-to-term rule for a sequence is

Multiply by 2 then subtract 7

The first term of the sequence is 6

Work out the value of the first negative term of the sequence. **[3 marks]**

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Answer \_\_\_\_\_

9 The term-to-term rule for a sequence is

Add 2 then divide by 2

The first term of the sequence is 14

Work out the value of the first term of the sequence that is not an integer. **[3 marks]**

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Answer \_\_\_\_\_

11

Turn over ►





10 The term-to-term rule for a sequence is

Multiply by 3 then add 20

The first term of the sequence is  $-9$

Work out the value of the first positive term of the sequence.

[3 marks]

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Answer \_\_\_\_\_

11 The term-to-term rule for a sequence is

Add 4 then multiply by 2

The third term of the sequence is 4.

Work out the first term of the sequence.

[3 marks]

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Answer \_\_\_\_\_







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The term-to-term rules for two sequences are shown below.

Sequence A

Add 3 then multiply by 2

Sequence B

Multiply by 3 then subtract 3

The first term of both sequences is 6

Show that the third terms in both sequences are equal.

[4 marks]

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