

example

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... (12)

$2n$: (2) (4) (6) (8) (10) ... (24)

5, 7, 9, 11, 13 ... 27

- first difference is 2 (so using $2n$)
- terms in sequence are 3 more than $2n$

n^{th} term rule : $2n + 3$

problem 1

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... (20)

$\square n$: (4) (8) (12) (16) (20) ... ()

3, 7, 11, 15, 19 ... 79

- first difference is \square (so using $\square n$)
- terms in sequence are 1 less than $\square n$

n^{th} term rule : $\square n - 1$

problem 2

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... (15)

$3n$: (3) (6) (9) (12) (15) ... (45)

7, 10, 13, 16, 19 ... ()

- first difference is 3 (so using $3n$)
- terms in sequence are \square than $3n$

n^{th} term rule : $3n \square \square$

problem 3

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... (13)

$\square n$: () () () () () ... ()

7, 12, 17, 22, 27 ... ()

- first difference is \square (so using $\square n$)
- terms in sequence are \square than $\square n$

n^{th} term rule : $\square n \square \square$

problem 4

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... ()

$\square n$: () () () () () ... (43)

1, 4, 7, 10, 13 ... ()

- first difference is \square (so using $\square n$)
- terms in sequence are \square than $\square n$

n^{th} term rule : $\square n \square \square$

problem 5

write down a rule for finding the n^{th} term in the following sequence ...

n : (1) (2) (3) (4) (5) ... ()

$\square n$: () () () () () ... ()

7, 9, 11, 13, 15 ... 41

- first difference is \square (so using $\square n$)
- terms in sequence are \square than $\square n$

n^{th} term rule : $\square n \square \square$