

Sequences and equations

1

Which term of this sequence is 65?

5 8 11 14 ...

$$n\text{th term } 3n + 2 = 65$$

$$3n = 63$$

$$n =$$

Answer _____

2

Which term of this sequence is 83?

7 11 15 19 ...

$$n\text{th term } 4n + 3 = 83$$

$$=$$

$$n =$$

Answer _____

3

Which term of this sequence is 147?

2 7 12 17 ...

$$n\text{th term } =$$

$$=$$

$$n =$$

Answer _____

4

Which term of this sequence is -16?

20 17 14 11 ...

$$n =$$

Answer _____

5

Is 100 a term of this sequence?
Explain how you know.

3 8 13 18 ...

Answer _____

6

Find the first term of this sequence that
is greater than 200.

9 16 23 30 ...

Answer _____

7

Sequence A: 43, 46, 49, 52, ... Sequence
B: 15, 20, 25, 30, ... Which term number
is the same in both? What is the term?

Answer _____

8

In a linear sequence the 5th term is 23
and the 9th term is 39. Find the n th term.

? ? ? ? 23 ...

Answer _____

Sequences and equations *further practice*

9

Which term of this sequence is 60?

1.5 3 4.5 6 ...

Answer _____

10

Is -50 a term of this sequence?
Explain how you know.

34 30 26 22 ...

Answer _____

11

Which pattern uses exactly
100 matches?

Pattern 1 Pattern 2 Pattern 3

Answer _____

12

How many terms of this sequence
are positive?

120 113 106 99 ...

Answer _____

13

The n th term of a sequence is $an + 5$.
The 4th term is 29. Find a , then the
10th term.

Answer _____

14

Zara saves £25 in week 1 and then £15
more each week. In which week does
she first have more than £400?

£25 £40 £55 £70 ...

Answer _____

15

One sequence goes down: 97, 94, 91, ...
The other goes up: 6, 10, 14, ... Which
term number is the same in both?

Answer _____

16

Mia says 75 is in this sequence because
every term ends in 4 or 9 and 75
does not. Is 75 in the sequence?
Show it with an equation.

4 9 14 19 ...

Answer _____