For every question write three rows: the positions, then $a \times n$, then the real terms.

1 Find the nth term. The first three have the rows ruled for you.

(a) $8, 13, 18, 23, \ldots$ (1)

(b) $6, 10, 14, 18, \ldots$ (1)

(c) $9, 12, 15, 18, \ldots$ (1)

(d) $4, 11, 18, 25, \ldots$ (1)

(4 marks)

2 Find the nth term.

(a) $5, 11, 17, 23, \ldots$ (1)

(b) $10, 18, 26, 34, \ldots$ (1)

(c) $3, 12, 21, 30, \ldots$ (1)

(d) $14, 16, 18, 20, \ldots$ (1)

(4 marks)

3 For each sequence, write down the common difference and then the nth term.

(a) $1, 5, 9, 13, \ldots$ (1)

(b) $7, 9, 11, 13, \ldots$ (1)

(c) $2, 9, 16, 23, \ldots$ (1)

(3 marks)

4 A sequence has nth term $4n + 7$.

(a) Write down the first four terms (1)

(b) Write down the common difference (1)

(c) What do you notice about the common difference and the rule? (2)

(4 marks)

5 Find the nth term of each sequence, then check your rule on the fourth term.

(a) $13, 18, 23, 28, \ldots$ (2)

(b) $6, 13, 20, 27, \ldots$ (2)

(4 marks)