



## GCSE Foundation

14

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43 minutes



42 marks

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*Sequences*

**M1.** (a) Add 6 or +6 or plus 6  
oe

**B1**

(b) 38 and 44  
*ft from their rule*

**B1 ft**

(c)  $302 - 2 \times 6$  or  $302 - 6 - 6$   
oe eg use  $6n + 2$   
*Evidence of subtracting 6 from 302 from  $302 - 6 (-6)$*

**M1**

290  
*ft from their rule*

**A1 ft**

**[4]**

**M2.** (a) (2), -2  
*B1 for showing next term is 2*

**B2**

(b)  $3n - 2$   
*3rd expression*

**B1**

**[3]**

**M3.** (a) 26

**B1**

80

**B1 ft**

(b)  $((6) - 4) \div 2$  or  $(6) \div 2 - 2$   
*Condone missing brackets*

**M1**

1

**A1**

(their  $1 - 4) \div 2$  or their  $1 \div 2 - 2$

**M1**

$-\frac{3}{2}$

oe

**A1**

**[6]**

**M4.** (a) 66 and 34

*B1 for each*

**B2**

(b)  $(26 - 6) \div 4$  or 5 seen

*or their difference  $\div 4$*

**M1**

21, 16, 11

*Any order*

**A1**

**[4]**

**M5.** (a) 14

**B1**

41

*ft their first answer  $\times 3 - 1$*

**B1 ft**

(b) 10, 15, 20

**B1**

(c)  $3n$

**M1**

$3n + 4$

**A1**

**[5]**

**M6.** (a) 43

*Ignore fw eg, 43, 50 or 43, 51*

*Do not allow eg, 29, 36, 40, 43 not allowed*

**B1**

(b) 1, 4 and 16

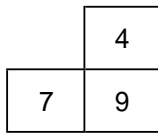
*B1 For two correct (and one incorrect)*

*B1 For 3 correct and 1 incorrect*

**B2**

**[3]**

**M7.**



*B1 For two correct*

**B1**

**[1]**

**M8.**

(a) Term to term rule  $\rightarrow \times 2$

*oe eg, double each time*

*or one more than the sum of the previous terms*

**B1**

(b) Term to term rule  $\rightarrow +$  consecutive integers

*oe eg, add 1 more each time*

*or sum of previous 3 terms*

**B1**

**[2]**

**M9.**

(a) Correct diagram

**B1**

(b) (i)  $3 \rightarrow 11, 4 \rightarrow 14$  **and**  $5 \rightarrow 17$

**B1**

(ii) 29

**B1**

(c) 299

**B1**

**[4]**

**M10.**

(a) 16

**B1**

(b) Add 3

*oe Allow  $n + 3$*

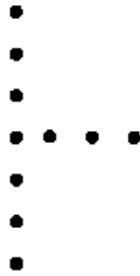
**B1**

**[2]**

**M11.** (a) 64

**B1**

(b) (i)



**B1**

(ii) 13

**B1**

(c) 26

**B1**

**[4]**

**M12.**  $1a = 17$ ;  $b = 47$ ;  $c = 15$   
*ft c from their b*

**B1, B1, B1 ft**

**[3]**

