

### QUESTION 1.6

(a)  $32 = u_1 + (10 - 1) \times (-6)$  (M1)

**Notes:** Award (M1) for correct substitution in correct formula.  
Accept correct alternative methods.

$u_1 = 86$  (A1) (C2)

(b)  $u_{21} = 86 + (21 - 1) \times (-6)$  (M1)  
 $u_{21} = -34$  (A1)(ft)

**Notes:** Award (M1) for correct substitution in correct formula.  
Accept correct alternative methods.  
Award (M1) for a list of at least 5 correct terms seen.  
Follow through from their answer to part (a).

**OR**

$u_{21} = 32 + 11 \times (-6)$  (M1)  
 $u_{21} = -34$  (A1) (C2)

(c)  $S_{30} = \frac{30}{2} (2 \times 86 + (30 - 1) \times (-6))$  (M1)

**Notes:** Award (M1) for their correct substitution in correct formula.  
Accept correct alternative methods. For a list award (M1) for the correct addition of at least 10 terms.

$S_{30} = -30$  (A1)(ft) (C2)

**Notes:** Follow through from their answer to part (a).

[6 marks]