

## Nth Term of Linear Sequences

Work out the first four terms of the sequence with these nth terms.

- (a)  $n + 1$       (b)  $n + 2$   
(c)  $2n + 1$     (d)  $2n + 2$   
(e)  $3n + 2$       (f)  $3n - 2$   
(g)  $0.5n + 3$     (h)  $6 - n$   
(i)  $12 - n$       (j)  $12 - 2n$

- (a) 2, 3, 4, 5    (b) 3, 4, 5, 6  
(c) 3, 5, 7, 9    (d) 4, 6, 8, 10  
(e) 5, 8, 11, 14    (f) 1, 4, 7, 10  
(g) 3.5, 4, 4.5, 5    (h) 5, 4, 3, 2  
(i) 11, 10, 9, 8    (j) 10, 8, 6, 4

Find the nth term for each of these sequences.

- (a) 4, 7, 10, 13, ...  
(b) 5, 8, 11, 14, ...  
(c) 5, 9, 13, 17, ...  
(d) 4, 8, 12, 16, ...  
(e) 0, 4, 8, 12, ...  
(f) 4, 5, 6, 7, ...  
(g) 10, 8, 6, 4, ...  
(h) 10, 5, 0, -5, ...  
(i) 10, 9, 8, 7, ...  
(j) -10, -9, -8, -7, ...

- (a)  $3n + 1$   
(b)  $3n + 2$   
(c)  $4n + 1$   
(d)  $4n$   
(e)  $4n - 4$   
(f)  $n + 3$   
(g)  $12 - 2n$   
(h)  $15 - 5n$   
(i)  $11 - n$   
(j)  $n - 11$

Find the nth term of these sequences.

- (a) 1.5, 2, 2.5, 3, ...  
(b) 4.2, 4.4, 4.6, 4.8, ...  
(c) 8, 7.5, 7, 6.5, ...  
(d) -2, -2.5, -3, -3.5, ...

- (a)  $0.5n + 1$   
(b)  $0.2n + 4$   
(c)  $8.5 - 0.5n$   
(d)  $-1.5 - 0.5n$

Find the 100th term of these sequences.

- (a) 5, 9, 13, 17, ...  
(b) 3, 9, 15, 21, ...  
(c) 1.5, 3, 4.5, 6, ...  
(d) 4, 2, 0, -2, ...  
(e)  $\frac{1}{2}, 1, \frac{3}{2}, 2, \dots$   
(f) -3, -5, -7, -9, ...

- (a)  $4n + 1$ , 401  
(b)  $6n - 3$ , 597  
(c)  $1.5n$ , 150  
(d)  $6 - 2n$ , -194  
(e)  $0.5n$ , 50  
(f)  $-1 - 2n$ , -201