Solutions – Geometric Sequences (A)

5, –15, 45, –135, ... Find a formula for the n^{th} term.

$a_n = 5(-3)^{n-1}$

2, –4, 8, –16, ... Find a formula for the n^{th} term.

$a_n = 2(-2)^{n-1}$

–1, 3, –9, 27, ... Find a formula for the n^{th} term.

$a_n = -(-3)^{n-1}$

–2, 10, –50, 250, ... Find a formula for the n^{th} term.

$a_n = -2(-5)^{n-1}$

–10, 20, –40, 80, ... Find a formula for the n^{th} term.

$a_n = -10(-2)^{n-1}$

–9, –18, –36, –72, ... Find a formula for the n^{th} term.

$a_n = -9(2)^{n-1}$

Solutions – Geometric Sequences (B)

4, 8, 16, 32, ... Find a formula for the n^{th} term.

$a_n = 4(2)^{n-1}$

1, –2, 4, –8, ... Find a formula for the n^{th} term.

$a_n = (-2)^{n-1}$

–6, 30, –150, 750, ... Find a formula for the n^{th} term.

$a_n = -6(-5)^{n-1}$

9, 18, 36, 72, ... Find a formula for the n^{th} term.

$a_n = 9(2)^{n-1}$

4, –20, 100, –500, ... Find a formula for the n^{th} term.

$a_n = 4(-5)^{n-1}$

2, 4, 8, 16, ... Find a formula for the n^{th} term.

$a_n = 2(2)^{n-1}$

Solutions – Geometric Sequences (C)

3, 6, 12, 24, ... Find a formula for the n^{th} term.

$a_n = 3(2)^{n-1}$

8, 16, 32, 64, ... Find a formula for the n^{th} term.

$a_n = 8(2)^{n-1}$

–4, –8, –16, –32, ... Find a formula for the n^{th} term.

$a_n = -4(2)^{n-1}$

–4, –16, –64, –256, ... Find a formula for the n^{th} term.

$a_n = -4(4)^{n-1}$

4, 16, 64, 256, ... Find a formula for the n^{th} term.

$a_n = 4(4)^{n-1}$

–5, –10, –20, –40, ... Find a formula for the n^{th} term.

$a_n = -5(2)^{n-1}$

Solutions – Geometric Sequences (D)

–3, 6, –12, 24, ... Find a formula for the n^{th} term.

$a_n = -3(-2)^{n-1}$

10, 20, 40, 80, ... Find a formula for the n^{th} term.

$a_n = 10(2)^{n-1}$

–10, 20, –40, 80, ... Find a formula for the n^{th} term.

$a_n = -10(-2)^{n-1}$

–4, –20, –100, –500, ... Find a formula for the n^{th} term.

$a_n = -4(5)^{n-1}$

5, –10, 20, –40, ... Find a formula for the n^{th} term.

$a_n = 5(-2)^{n-1}$

8, 16, 32, 64, ... Find a formula for the n^{th} term.

$a_n = 8(2)^{n-1}$

Solutions – Geometric Sequences (E)

–8, –16, –32, –64, ... Find a formula for the n^{th} term.

$a_n = -8(2)^{n-1}$

3, 15, 75, 375, ... Find a formula for the n^{th} term.

$a_n = 3(5)^{n-1}$

–6, 18, –54, 162, ... Find a formula for the n^{th} term.

$a_n = -6(-3)^{n-1}$

9, 36, 144, 576, ... Find a formula for the n^{th} term.

$a_n = 9(4)^{n-1}$

–9, 27, –81, 243, ... Find a formula for the n^{th} term.

$a_n = -9(-3)^{n-1}$

8, 24, 72, 216, ... Find a formula for the n^{th} term.

$a_n = 8(3)^{n-1}$

Solutions – Geometric Sequences (F)

1, 2, 4, 8, ... Find a formula for the n^{th} term.

$a_n = (2)^{n-1}$

–9, 27, –81, 243, ... Find a formula for the n^{th} term.

$a_n = -9(-3)^{n-1}$

6, 12, 24, 48, ... Find a formula for the n^{th} term.

$a_n = 6(2)^{n-1}$

–2, –4, –8, –16, ... Find a formula for the n^{th} term.

$a_n = -2(2)^{n-1}$

–8, 24, –72, 216, ... Find a formula for the n^{th} term.

$a_n = -8(-3)^{n-1}$

–3, –12, –48, –192, ... Find a formula for the n^{th} term.

$a_n = -3(4)^{n-1}$

Solutions – Geometric Sequences (G)

–2, –10, –50, –250, ... Find a formula for the n^{th} term.

$a_n = -2(5)^{n-1}$

1, 2, 4, 8, ... Find a formula for the n^{th} term.

$a_n = (2)^{n-1}$

–8, 40, –200, 1000, ... Find a formula for the n^{th} term.

$a_n = -8(-5)^{n-1}$

–2, –8, –32, –128, ... Find a formula for the n^{th} term.

$a_n = -2(4)^{n-1}$

6, –30, 150, –750, ... Find a formula for the n^{th} term.

$a_n = 6(-5)^{n-1}$

–4, –20, –100, –500, ... Find a formula for the n^{th} term.

$a_n = -4(5)^{n-1}$

Solutions – Geometric Sequences (H)

–7, –14, –28, –56, ... Find a formula for the n^{th} term.

$a_n = -7(2)^{n-1}$

5, 25, 125, 625, ... Find a formula for the n^{th} term.

$a_n = 5(5)^{n-1}$

1, 2, 4, 8, ... Find a formula for the n^{th} term.

$a_n = (2)^{n-1}$

1, –2, 4, –8, ... Find a formula for the n^{th} term.

$a_n = (-2)^{n-1}$

–1, –2, –4, –8, ... Find a formula for the n^{th} term.

$a_n = -(2)^{n-1}$

1, –3, 9, –27, ... Find a formula for the n^{th} term.

$a_n = (-3)^{n-1}$

Solutions – Geometric Sequences (I)

–3, 12, –48, 192, ... Find a formula for the n^{th} term.

$a_n = -3(-4)^{n-1}$

–9, –18, –36, –72, ... Find a formula for the n^{th} term.

$a_n = -9(2)^{n-1}$

–5, 20, –80, 320, ... Find a formula for the n^{th} term.

$a_n = -5(-4)^{n-1}$

–7, 28, –112, 448, ... Find a formula for the n^{th} term.

$a_n = -7(-4)^{n-1}$

–1, –4, –16, –64, ... Find a formula for the n^{th} term.

$a_n = -(4)^{n-1}$

5, 10, 20, 40, ... Find a formula for the n^{th} term.

$a_n = 5(2)^{n-1}$

Solutions – Geometric Sequences (J)

5, 10, 20, 40, ... Find a formula for the n^{th} term.

$a_n = 5(2)^{n-1}$

3, 6, 12, 24, ... Find a formula for the n^{th} term.

$a_n = 3(2)^{n-1}$

–4, –8, –16, –32, ... Find a formula for the n^{th} term.

$a_n = -4(2)^{n-1}$

1, 2, 4, 8, ... Find a formula for the n^{th} term.

$a_n = (2)^{n-1}$

–9, –18, –36, –72, ... Find a formula for the n^{th} term.

$a_n = -9(2)^{n-1}$

1, 2, 4, 8, ... Find a formula for the n^{th} term.

$a_n = (2)^{n-1}$