1. Write down the $6^{th}$ and $8^{th}$ terms in each case.

(a) 2, 4, 6, 8 …
(b) 3, 6, 9, 12 …
(c) 4, 8, 12, 16 …
(d) 5, 7, 9, 11 …
(e) 4, 7, 10, 13 …
(f) 7, 12, 17, 22 …
(g) 2, 4, 8, 14 …
(h) 3, 5, 9, 15 …
(i) 4, 7, 13, 22 …
(j) 8, 11, 17, 26 …
(k) 5, 10, 20, 35 …
(l) 6, 10, 18, 30 …
(m) 13, 14, 16, 19 …
(n) 13, 20, 34, 55 …
(o) 11, 20, 38, 65 …

2. If $\boldsymbol{n}$ =1 is the first term, find the formula for the $\boldsymbol{n}$ th term in each case.

(a) 5, 10, 15, 20 …
(b) 4, 7, 10, 13 …
(c) 2, 7, 12, 17 …
(d) 1, 9, 17, 25 …
(e) 6, 11, 16, 21 …
(f) 5, 17, 29, 41 …
(g) 9, 12, 15, 18 …
(h) 21, 25, 31, 36 …
(i) 10, 17, 24, 31 …
(j) 19, 25, 31, 37 …
(k) 13, 20, 27, 34 …
(l) 29, 36, 43, 50 …
(m) 11, 15, 19, 23 …
(n) 9, 22, 35, 48 …
(o) 3, 30, 57, 84 …

3. If $\boldsymbol{n}$ =1 is the first term, the $\boldsymbol{n}$ th term can be witten as $\boldsymbol{a} + \boldsymbol{b}(\boldsymbol{n} - 1)$ where $\boldsymbol{a}$ and $\boldsymbol{b}$ are constants. Find $\boldsymbol{a}$ and $\boldsymbol{b}$

(a) 2, 4, 6, 8 …
(b) 4, 8, 12, 16 …
(c) 5, 7, 9, 11
(d) 6, 19, 32, 45 …
(e) 17, 22, 27, 32 …
(f) 11, 15, 19, 23 …
(g) 19, 25, 31, 37 …
(h) 57, 64, 71, 78 …
(i) 101, 103, 105, 107 …
(j) 2, 58, 114, 170 …
(k) 29, 42, 55, 68 …
(l) 4, 31, 58, 85 …
(m) 11, 22, 33, 44 …
(n) 100, 200, 300, 400
(o) 17, 40, 63, 86 …

1.

(a) 12, 16 (b) 18, 24 (c) 24, 32

(d) 15, 19 (e) 19, 25 (f) 32, 42

(g) 32, 58 (h) 33, 59 (i) 49, 88

(j) 53, 92 (k) 80, 145 (l) 66, 118

(m) 28, 41 (n) 118, 208 (o) 146, 279

2.

(a) $5n$ (b) $4 + 3(n-1)$ (c) $2 + 5(n-1)$

(d) $1 + 8(n-1)$ (e) $6 + 5(n-1)$ (f) $5 + 12(n-1)$

(g) $3 + 7(n-1)$ (h) $1 + 6(n-1)$ (i) $1 + 11(n-1)$

(j) $19 + 6(n-1)$ (k) $13 + 7(n-1)$ (l) $29 + 7(n-1)$

(m) $11 + 4(n-1)$ (n) $9 + 13(n-1)$ (o) $3 + 27(n-1)$

3.

(a) 2, 2 (b) 4, 4 (c) 5, 2

(d) 6, 13 (e) 17, 5 (f) 11, 4

(g) 19, 6 (h) 57, 7 (i) 101, 2

(j) 2, 56 (k) 29, 13 (l) 4, 27

(m) 11, 11 (n) 100, 100 (o) 17, 23

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