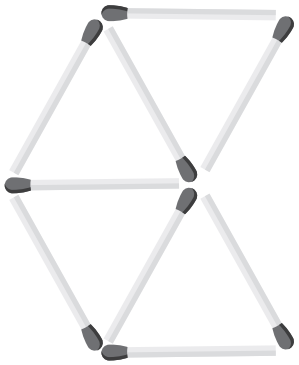
Jawapan

Praktis 1

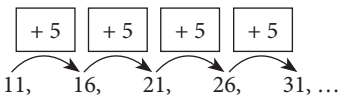
Praktis Formatif

1 3, 5, 7, 9, …



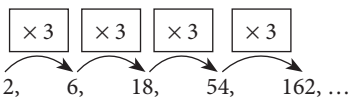
Jawapan/*Answer*: **A**

2 (a)



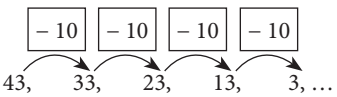
Pola: Tambah 5 kepada nombor sebelumnya.
Pattern: *Add* 5 *to its previous number.*

(b)



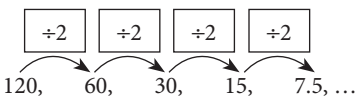
Pola: Darab 3 kepada nombor sebelumnya.
Pattern: *Multiply* 3 *to its previous number.*

(c)



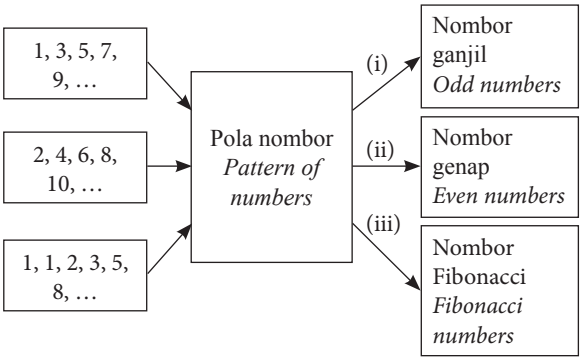
Pola: Tolak 10 daripada nombor sebelumnya.
Pattern: *Subtract* 10 *from its previous number.*

(d)

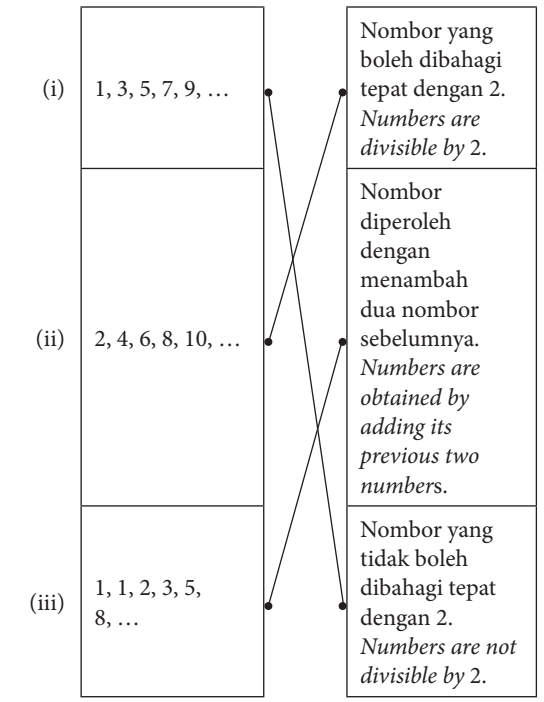


Pola: Bahagi 2 kepada nombor sebelumnya.
Pattern: *Divide* 2 *to its previous number.*

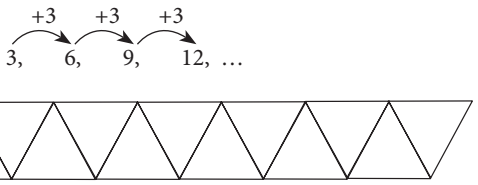
3 (a)



(b)

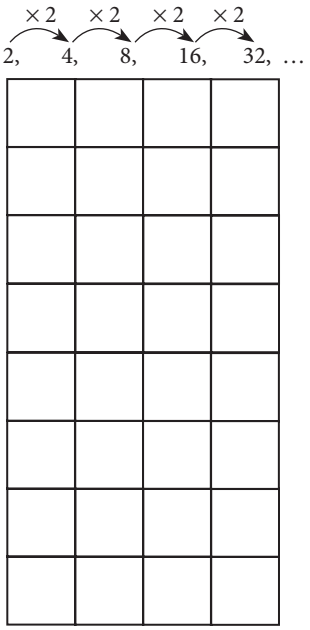


4 (a)



(i) ✓

(b)



(ii) ✓

5

1 1
1 *a* 1
1 *b* *c* 1
1 *d* *e* *f* 1
1 5 10 10 5 1

$a = 1 + 1 = 2$
$b = 1 + 2 = 3$
$c = 2 + 1 = 3$
$d = 1 + 3 = 4$
$e = 3 + 3 = 6$
$f = 3 + 1 = 4$

6

+1 +2 +1 +2 +1 +2 +1 +2 +1
3, 4, 6, 7, 9, 10, 12, *p*, *q*, *r*, …

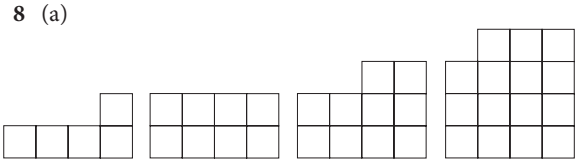
$p = 12 + 1 = 13$
$q = 13 + 2 = 15$
$r = 15 + 1 = 16$

7

+6 +6 +6 +6
3, 9, 15, 21, 27, …

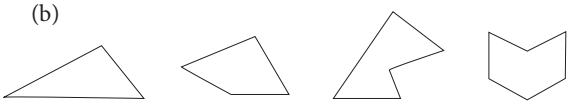
Jawapan/*Answer*: **B**

8 (a)



5, 8, 10, 15, … bukan suatu jujukan.
Bilangan segi empat sama tidak berubah mengikut suatu pola tertentu.
5, 8, 10, 15, … *is not a sequence.*
The number of squares does not vary in a certain pattern.

(b)



3, 4, 5, 6, … ialah suatu jujukan.
Bilangan sisi bagi poligon bertambah sebanyak 1 kepada poligon sebelumnya.
3, 4, 5, 6, … *is a sequence.*
The number of sides of a polygon increases by 1 *to its previous polygon.*

9 (a)

+8 +8 +8 +8 +8
2, 10, 18, 26, 34, 42, …

(b)

× 3 × 3 × 3 × 3
5, 15, 45, 135, 405, …

(c)

− 5 − 5 − 5 − 5
52, 47, 42, 37, 32, …

(d)

÷ 2 ÷ 2 ÷ 2 ÷ 2
8, 4, 2, 1, $\frac{1}{2}$, …

10 (a)

− 12 − 12 − 12 − 12 − 12
82, 70, 58, 46, 34, 22, …

Tolak 12 daripada nombor sebelumnya.
Subtract 12 *from its previous number.*

(b)

$+\frac{1}{2}$ $+\frac{1}{2}$ $+\frac{1}{2}$ $+\frac{1}{2}$ $+\frac{1}{2}$
0, $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, …

Tambah $\frac{1}{2}$ kepada nombor sebelumnya.
Add $\frac{1}{2}$ *to its previous number.*

(c)

÷ 2 ÷ 2 ÷ 2 ÷ 2 ÷ 2
24, 12, 6, 3, 1.5, 0.75, …

Bahagi 2 kepada nombor sebelumnya.
Divide 2 *to its previous number.*

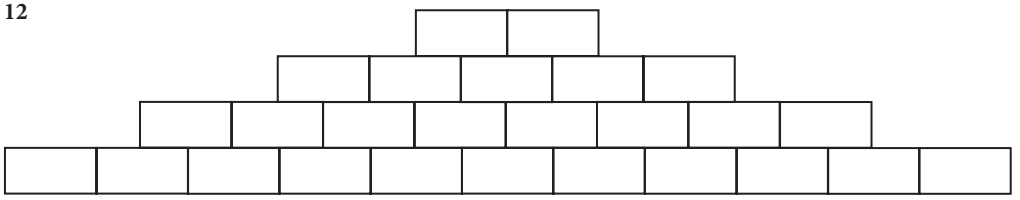
(d) $\times 0.3 \quad \times 0.3 \quad \times 0.3 \quad \times 0.3 \quad \times 0.3$

1, 0.3, 0.09, 0.027, 0.0081, 0.00243, …

Darab 0.3 kepada nombor sebelumnya.
Multiply 0.3 *to its previous number.*

11 $22 = 13(1) + 9$
$35 = 13(2) + 9$
$48 = 13(3) + 9$
$61 = 13(4) + 9$
⋮
$T_n = 13n + 9$, $n = 1, 2, 3, 4, \ldots$
Jawapan/*Answer*: **B**

12



Baris/*Row* 1
Baris/*Row* 2
Baris/*Row* 3
Baris/*Row* 4

(a) $+3 \quad +3 \quad +3 \quad +3$

2, 5, 8, 11, 14, …

Bilangan batu-bata pada baris kelima ialah 14.
The number of bricks on the fifth row is 14.

(b) (i) 2, 5, 8, 11, …

(ii) Baris 1 mempunyai 2 keping batu-bata. Baris berikutnya mempunyai 3 keping batu-bata lebih daripada baris sebelumnya.
Row 1 *has* 2 *bricks. Its subsequent row has* 3 *bricks more than its previous row.*

(iii) $2 = 3(1) - 1$
$5 = 3(2) - 1$
$8 = 3(3) - 1$
$11 = 3(4) - 1$
⋮
$T_n = 3n - 1$, $n = 1, 2, 3, 4, \ldots$

13 (a) $3 = 5(1) - 2$
$8 = 5(2) - 2$
$13 = 5(3) - 2$
$18 = 5(4) - 2$
$23 = 5(5) - 2$

(b) $T_n = 5n - 2$, $n = 1, 2, 3, 4, \ldots$

14 (a) $T_1 = 17 = 4 \times 1 + 13$
$T_2 = 21 = 4 \times 2 + 13$
$T_3 = 25 = 4 \times 3 + 13$
$T_n = 4 \times n + 13$, $n = 1, 2, 3, 4, \ldots$

(b) (i) $T_{17} = 4 \times 17 + 13$
$= 68 + 13$
$= 81$

(ii) $T_{45} = 4 \times 45 + 13$
$= 180 + 13$
$= 193$

15 (a) $+24 \quad +24 \quad +24 \quad +24$

65, 89, 113, 137, x

$x = 137 + 24$
$= 161$

Beg 5 mengandungi 161 biji guli.
Bag 5 *contains* 161 *marbles.*

(b) $65 = 24 \times 1 + 41$
$89 = 24 \times 2 + 41$
$113 = 24 \times 3 + 41$
$137 = 24 \times 4 + 41$
⋮
$T_n = 24 \times n + 41$,t $n = 1, 2, 3, 4, \ldots$

(c) (i) $T_{16} = 24 \times 16 + 41$
$= 384 + 41$
$= 425$

(ii) $T_n = 24 \times n + 41$
$1\,313 = 24 \times n + 41$
$1\,272 = 24n$
$n = 53$

Praktis Sumatif

1

$$\overset{+4}{\underset{25,}{\curvearrowright}}\ \overset{+4}{\underset{29,}{\curvearrowright}}\ \overset{+4}{\underset{33,}{\curvearrowright}}\ \overset{+4}{\underset{37,}{\curvearrowright}}\ \overset{+4}{\underset{m,}{\curvearrowright}}\ \overset{+4}{\underset{n,}{\curvearrowright}}\ 49, \ldots$$

$m = 37 + 4$
$= 41$
$n = 41 + 4$
$= 45$
$m + n = 41 + 45$
$= 86$
Jawapan/*Answer*: **C**

2

$$\overset{-20}{\underset{150,}{\curvearrowright}}\ \overset{-20}{\underset{130,}{\curvearrowright}}\ \overset{-20}{\underset{110,}{\curvearrowright}}\ \overset{-20}{\underset{90,}{\curvearrowright}}\ \overset{-20}{\underset{70,}{\curvearrowright}}\ 50, \ldots$$

Dua nombor yang berikutnya ialah 70 dan 50.
The next two numbers are 70 *and* 50.
$70 + 50 = 120$
Jawapan/*Answer*: **D**

3

$$\overset{\times 3}{\underset{1,}{\curvearrowright}}\ \overset{\times 3}{\underset{3,}{\curvearrowright}}\ \overset{\times 3}{\underset{9,}{\curvearrowright}}\ \overset{\times 3}{\underset{27,}{\curvearrowright}}\ \overset{\times 3}{\underset{81,}{\curvearrowright}}\ p, \ldots$$

$p = 81 \times 3$
$= 243$
Jawapan/*Answer*: **B**

4

$$\overset{+7}{\underset{-41,}{\curvearrowright}}\ \overset{+14}{\underset{-34,}{\curvearrowright}}\ \overset{+21}{\underset{-20,}{\curvearrowright}}\ \overset{+28}{\underset{1,}{\curvearrowright}}\ \overset{+35}{\underset{k,}{\curvearrowright}}\ 64, \ldots$$

$k = 1 + 28$
$= 29$
Jawapan/*Answer*: **B**

5 7, 14, 21, 28, 35, …
$= 7(1), 7(2), 7(3), 7(4), 7(5), \ldots$
Sebutan ke-15
The 15^{th} *term*
$= 7(15)$
$=105$
Jawapan/*Answer*: **C**

6 (a) $T_1 = 2 = 7 \times 1 - 5$
$T_2 = 9 = 7 \times 2 - 5$
$T_3 = 16 = 7 \times 3 - 5$
$T_4 = 23 = 7 \times 4 - 5$
⋮
$T_n = 7 \times n - 5, n = 1, 2, 3, 4, \ldots$

(b) $T_{10} = 7 \times 10 - 5$
$= 65$
$T_{20} = 7 \times 20 - 5$
$= 135$
$T_{50} = 7 \times 50 - 5$
$= 345$

7 $T_1 = 74 = 82 - 8 \times 1$
$T_2 = 66 = 82 - 8 \times 2$
$T_3 = 58 = 82 - 8 \times 3$
$T_4 = 50 = 82 - 8 \times 4$
⋮
$T_n = 82 - 8 \times n, n = 1, 2, 3, 4, \ldots$
$T_8 = 82 - 8 \times 8$
$= 18$
$T_{36} = 82 - 8 \times 36$
$= -206$

8 (a)

Bilangan segi empat sama *Number of squares*	**Bilangan bulatan** *Number of circles*	**Pola** *Pattern*
1	4	$2 \times \boxed{1} + 2$
2	6	$2 \times \boxed{2} + 2$
3	8	$2 \times \boxed{3} + 2$
4	10	$2 \times \boxed{4} + 2$

(b) $T_n = 2n + 2, n = 1, 2, 3, 4, \ldots$

(c) (i) Apabila/*When* $n = 25, T_n = 2(25) + 2$
$= 52$

(ii) $T_n = 70$
$2n + 2 = 70$
$2n = 68$
$n = 34$