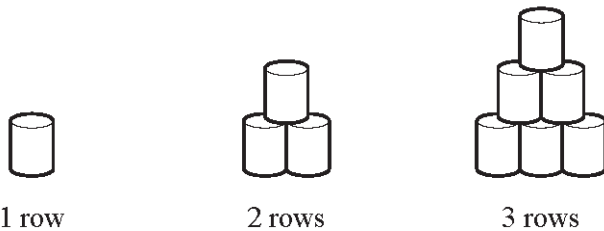


1040 - (0580-S 2013-Paper 1 (Core)/2-Q8) - SEQUENCES



Complete the table for 4 rows and 5 rows.

Number of rows	1	2	3	4	5
Number of cans	1	3	6		

[2]

1041 - (0580-S 2015-Paper 1 (Core)/1-Q20) - SEQUENCES

(a) 2, 3, 6, 11, 18, ...

(i) Write down the next two terms in this sequence.

Answer(a)(i) , [2]

(ii) Describe, in words, the rule for continuing this sequence.

Answer(a)(ii) [1]

(b) The n th term of a different sequence is $4n - 3$.

Work out the first three terms in this sequence.

Answer(b) , , [1]

1042 - (0580-S 2013-Paper 1 (Core)/1-Q10) - SEQUENCES

Here are the first four terms of a sequence.

4 11 18 25

Write down an expression for the n th term.

Answer [2]

1043 - (0580-W 2018-Paper 1 (Core)/1-Q19) - SEQUENCES

These are the first five terms in a sequence.

8 11 14 17 20

(a) Find the next term.

..... [1]

(b) Find an expression for the n th term.

..... [2]

1044 - (0580-S 2019-Paper 1 (Core)/3-Q21) - SEQUENCES

(a) Write down the next term in each sequence.

(i) 12, 7, 2, -3, -8, [1]

(ii) 4, 7, 13, 25, 49, [1]

(b) Find an expression, in terms of n , for the n th term of this sequence.

5, 8, 11, 14, ...

..... [2]

1045 - (0580-W 2015-Paper 1 (Core)/1-Q22) - SEQUENCES

(a) Write down the next term in each of these sequences.

(i) 5 9 13 17 ...

Answer(a)(i) [1]

(ii) 3 6 12 24 ...

Answer(a)(ii) [1]

(b) Here are the first four terms in a different sequence.

2 7 12 17

Find an expression for the n th term of this sequence.

Answer(b) [2]

1046 - (0580-S 2015-Paper 1 (Core)/2-Q18) - SEQUENCES

(a) Write down the next two terms in the following sequence.

73, 66, 59, 52, ,

[2]

(b) Write down an expression for the n th term of the sequence in part (a).

Answer(b) [2]

1047 - (0580-S 2018-Paper 1 (Core)/2-Q6) - SEQUENCES

Here is a sequence.

a , 13, 9, 3, -5, -15, b , ...

Find the value of a and the value of b .

$a =$

$b =$ [2]

exam m (A+) te

1048 - (0580-W 2016-Paper 1 (Core)/1-Q18) - SEQUENCES

Find the n th term of each sequence.

(a) 7, 13, 19, 25, 31, ...

..... [2]

(b) 9, 16, 25, 36, 49, ...

..... [2]

1049 - (0580-S 2018-Paper 1 (Core)/1-Q4) - SEQUENCES

The n th term of a sequence is $5n - 3$.

Write down the first three terms of the sequence.

.....,, [1]

1050 - (0580-W 2017-Paper 1 (Core)/3-Q20) - SEQUENCES

(a) These are the first five terms of a sequence.

4 10 16 22 28

(i) Write down the next term.

..... [1]

(ii) Write down the rule for continuing the sequence.

..... [1]

(b) These are the first five terms of a different sequence.

11 14 17 20 23

Find an expression for the n th term of this sequence.

..... [2]

1051 - (0580-W 2018-Paper 1 (Core)/2-Q14) - SEQUENCES

(a) The expression for the n th term of a sequence is $5n^2$.

Work out the third term in this sequence.

..... [1]

(b) These are the first five terms of a sequence.

-4 2 8 14 20

Find an expression for the n th term of this sequence.

..... [2]

1052 - (0580-S 2017-Paper 1 (Core)/3-Q7) - SEQUENCES

(a) Write down the next term in this sequence.

24, 22, 18, 12, 4, ...

..... [1]

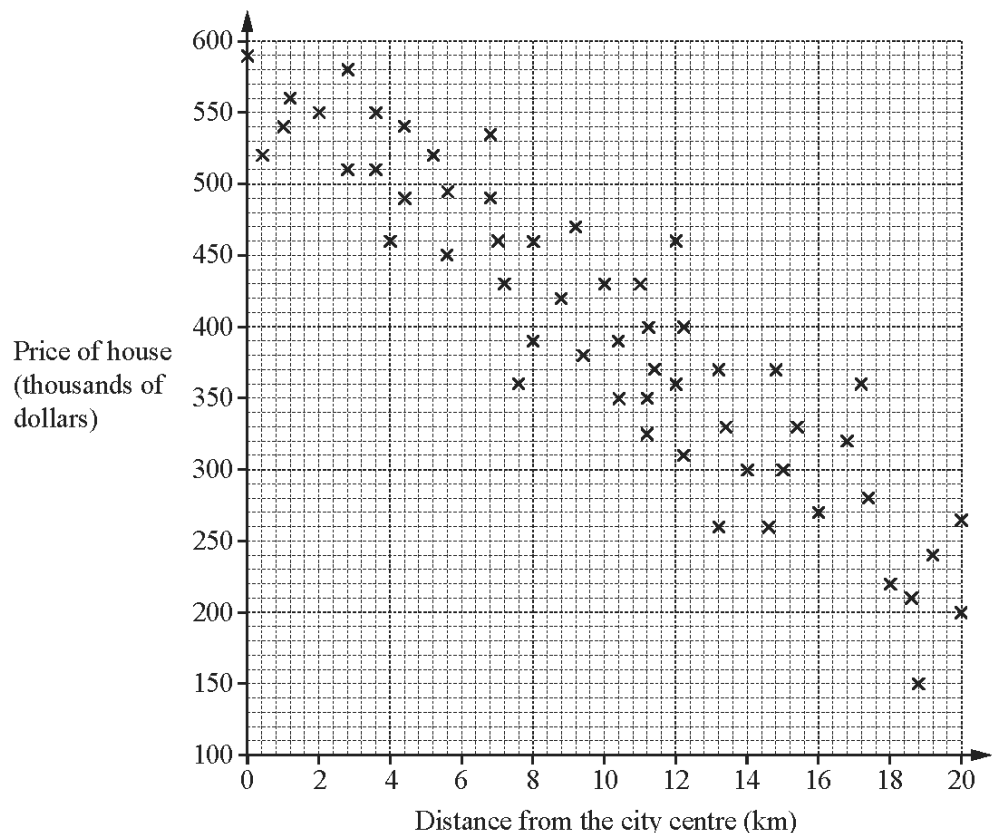
(b) The n th term of another sequence is $3n + 5$.

Write down the first three terms in this sequence.

.....,, [1]

1053 - (0580-S 2016-Paper 1 (Core)/1-Q18) - SEQUENCES

The scatter diagram shows the prices of houses for sale and their distances from the city centre.



(a) What type of correlation is shown in this scatter diagram?

..... [1]

(b) Brad wants to live as close to the city centre as possible. He has a maximum of \$500 000 to spend on one of these houses.

How close to the city centre can he live?

..... km [1]

(c) (i) Draw a line of best fit on the scatter diagram. [1]

(ii) Estimate the price of a house that is 14km from the city centre.

\$..... [1]

1054 - (0580-S 2016-Paper 1 (Core)/2-Q9) - SEQUENCES

Here are the first five terms in a sequence.

4 11 18 25 32

Find an expression for the n th term of this sequence.

..... [2]

1055 - (0580-S 2016-Paper 1 (Core)/1-Q17) - SEQUENCES

Find the next term in each of these sequences.

(a) 3, 7, 11, 15, ...

..... [1]

(b) 10, 7, 4, 1, ...

..... [1]

(c) 1, 9, 25, 49, ...

..... [1]

1056 - (0580-S 2019-Paper 1 (Core)/1-Q16) - SEQUENCES

These are the first four terms of a sequence.

5 8 11 14

(a) Write down the next term.

..... [1]

(b) Find an expression, in terms of n , for the n th term.

..... [2]

1057 - (0580-W 2015-Paper 1 (Core)/3-Q8) - SEQUENCES

These are the first four terms in a sequence.

21 17 13 9

(a) Write down the next number in this sequence.

Answer(a) [1]

(b) Write down the rule for continuing the sequence.

Answer(b) [1]

1058 - (0580-W 2013-Paper 1 (Core)/1-Q23) - SEQUENCES

(a) Here are the first four terms of a sequence.

27 23 19 15

(i) Write down the next term in the sequence.

Answer(a)(i) [1]

(ii) Explain how you worked out your answer to part (a)(i).

Answer(a)(ii) [1]

(b) The n th term of a different sequence is $4n - 2$.

Write down the first three terms of this sequence.

Answer(b) , , [1]

(c) Here are the first four terms of another sequence.

-1 2 5 8

Write down the n th term of this sequence.

Answer(c) [2]

1059 - (0580-W 2017-Paper 1 (Core)/2-Q22) - SEQUENCES

(a) These are the first four terms of a sequence.

8 15 22 29

(i) Write down the next term.

..... [1]

(ii) Write down the rule for continuing the sequence.

..... [1]

(b) These are the first four terms of a different sequence.

2 6 10 14

Find an expression for the n th term of this sequence.

..... [2]