

Sequences Starters

Starter 1 (1 of 3)

Matchsticks



?

1. Draw the next shape.
2. How many matchsticks in the 4th?

Starter 1 (1 of 3)

Matchsticks



?

1. Draw the next shape.
2. How many matchsticks in the 4th?

Answers



2. 13 sticks

Starter 1 (2 of 3)

Dots



3. Draw the next pattern.
4. How many dots in the 4th?

Starter 1 (2 of 3)

Dots



3. Draw the next pattern.
4. How many dots in the 4th?

Answers



- 3.
4. 16 dots

Starter 1 (3 of 3)

5. Complete The ^{ciąg}Sequence

13, 23, 33, __, __, __

Starter 1 (3 of 3)

5. Complete The ^{ciąg}Sequence

13, 23, 33, 43, 53, 63 (add 10)

Starter 2 (1 of 3)

Matchsticks



?

1. Draw shape 4.
2. How many matchsticks in shape 4?

Starter 2 (1 of 3)

Matchsticks



1. Draw shape 4.
2. How many matchsticks in shape 4?

Answers



2. 9 sticks

Starter 2 (2 of 3)

Dots



3. Draw pattern 4.
4. How many dots in pattern 4?

Starter 2 (2 of 3)

Dots



3. Draw pattern 4.
4. How many dots in pattern 4?

Answers



- 3.
4. 10 dots

Starter 2 (3 of 3)

5. Complete The ^{ciąg}Sequence

1, 3, 5, 7, __, __, __

Starter 2 (3 of 3)

ciąg

5. Complete The Sequence

1, 3, 5, 7, 9, 11, 13 (add 2)

Starter 3 (1 of 3)

Dots



1. Draw pattern 4.
2. How many dots in pattern 4?

Starter 3 (1 of 3)

Dots



1. Draw pattern 4.
2. How many dots in pattern 4?

Answers



- 1.
2. 20 dots (pattern is $n \times (n + 1)$ dots)

Starter 3 (2 of 3)

Matchsticks



?

3. How many sticks in the 10th shape?

reguła

4. Find a rule .

Starter 3 (2 of 3)

Matchsticks



3. How many sticks in the 10th shape?

reguła

4. Find a rule .

Answers

3. 31

reguła

4. Rule : $3n + 1$

Starter 3 (3 of 3)

5. Complete The ^{ciąg}Sequence

3, 6, 9, 12, __, __, __

^{wyraz}
6. 20th term ?

Starter 3 (3 of 3)

5. Complete The ^{ciąg}Sequence

3, 6, 9, 12, 15, 18, 21 (add 3) 6. 20th ^{wyraz}term ? 60

Starter 4 (1 of 3)

Matchsticks



reguła

1. Find a rule for the number of matchsticks.

wyraz

2. Use it to find the 20th term.

Starter 4 (1 of 3)

Matchsticks



?

reguła

1. Find a rule for the number of matchsticks.

wyraz

2. Use it to find the 20th term .

Answers

reguła

1. Rule : $2n + 1$

wyraz

2. 20th term : 41

Starter 4 (2 of 3)

Dots



reguła

3. Find a rule for the

number of dots.

4. Use it to find the

wyraz

10th term .

Starter 4 (2 of 3)

Dots



reguła

3. Find a rule for the

number of dots.

4. Use it to find the

wyraz

10th term .

Answers

reguła

3. Rule : $\frac{n(n+1)}{2}$

wyraz

4. 10th term : 55

Starter 4 (3 of 3)

5. Complete The **Sequence**

ciąg

wzór na n-ty wyraz reguła

5, 9, 13, 17, __, __, __

6.

*n*th term

rule ?

wyraz

100th term ?

Starter 4 (3 of 3)

5. Complete The **Sequence**

ciąg

wzór na n-ty wyraz reguła

5, 9, 13, 17, 21, 25, 29 (add 4)

6.

*n*th term

rule ?

wyraz

100th term ?

$4n + 1,$

401

Starter 5 (1 of 3)

Dots



1. Draw shape 4.
2. How many dots in shape 5?
3. Try to find a **reguła** **rule** .

Starter 5 (1 of 3)

Dots



1. Draw shape 4.
2. How many dots in shape 5?

reguła

3. Try to find a rule .

Answers

17 dots



reguła

1.

3. Rule : $4n - 3$

2. Shape 5 has

3

Starter 5 (2 of 3)

Special **Sequence**

1, 1, 2, 3, 5, 8, __, __, __

4. Next three **terms** ?

5. What is the **rule** ?

Starter 5 (2 of 3)

Special **Sequence**

1, 1, 2, 3, 5, 8, 13, 21, 34

- wyrazy
4. Next three terms ?
- reguła
5. What is the rule ?

Answers

4. 13, 21, 34

ciąg Fibonacciego

5. Fibonacci : add the

wyrazy
two previous terms

Starter 5 (3 of 3)

6. Complete The ^{ciąg}Sequence

1, 4, 9, 16, __, __, __

7. 20th ^{wyraz}term ?

Starter 5 (3 of 3)

ciąg

6. Complete The Sequence

liczby kwadratowe

wyraz

1, 4, 9, 16, 25, 36, 49 (square numbers n^2)

7. 20th term ?

400