

Number pattern and sequence

1. Which of these numbers is a square number and a cube number and a triangle number? Tick the correct number.

- ☐ 1
- ☐ 36
- ☐ 63

2. The first five multiples of 12 are: _____

3. What is the rule for this number pattern? 50, 40, 30, ... _____

4. What is the rule for this number pattern? -2, -4, -6, ... _____

5. What are the next two terms of this number pattern? 5, 9, 13 ... _____

6. What is the common difference of the following number sequence? 9, 7, 5, _____

7. What is the previous term of this number pattern? 10, 13, 16, ... _____

8. What is the previous term of this number pattern? 20, 15, 10, ... _____

9. What is the n th term of the number pattern 2, 4, 6, 8, ... _____

10. What is the n th term of the number pattern 14, 21, 28, 35, ... _____

11. What is the 10th term of the number pattern 50, 45, 40, ... _____

12. Find the next term of the sequence: 9, 12, 17, 24, 33 ... _____

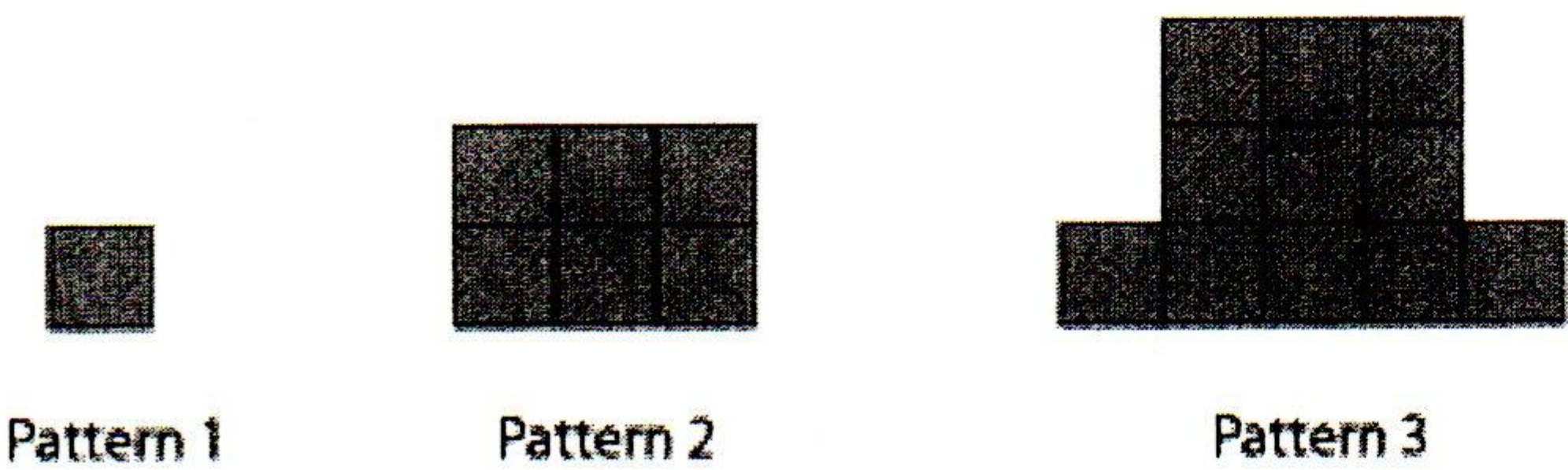
13. Find the n th term of the sequence: 6, 9, 14, 21, 30, ... _____

14. Find the next two terms of the sequence: 1, 8, 27, ... _____

15. Find the next term and the n th term of the sequence:

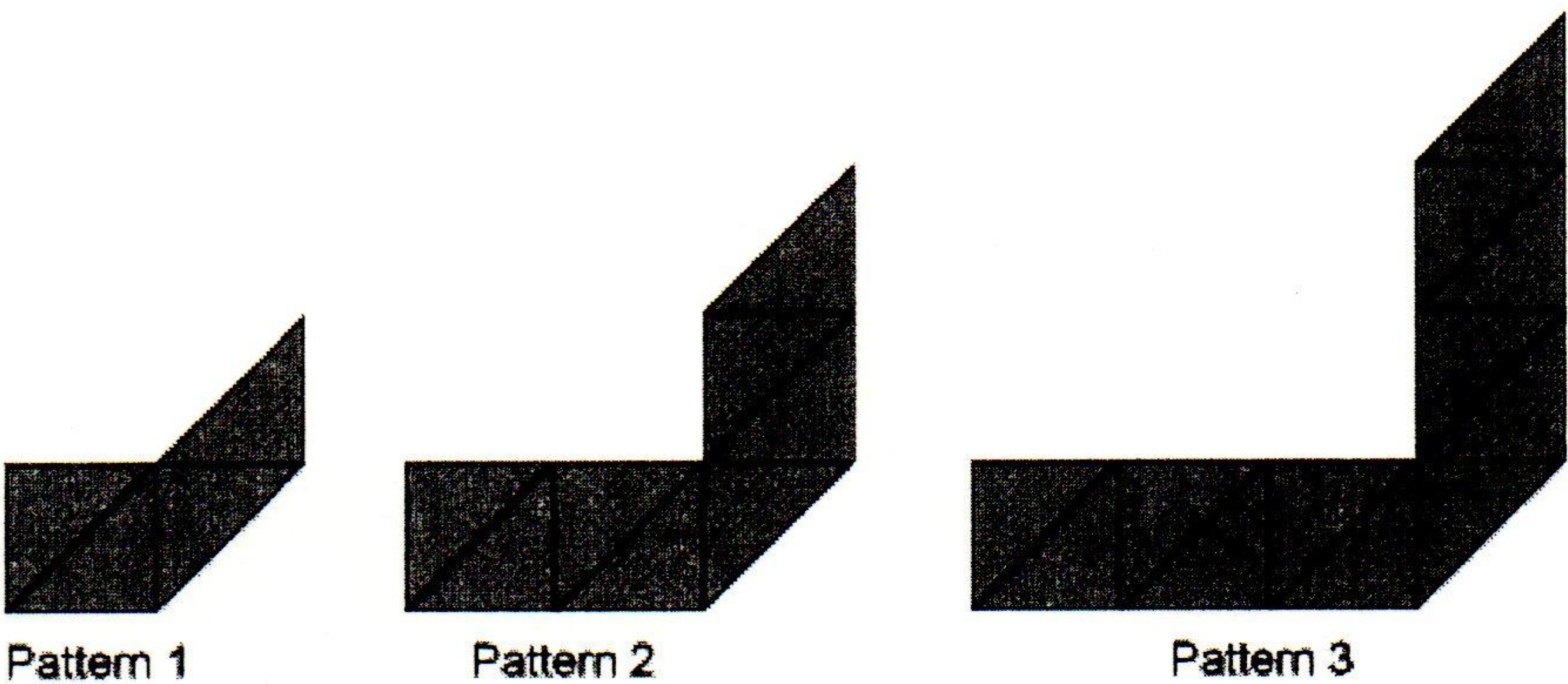
2+4, 8+4, 18+4, 32+4, 50+4, ...

16. What is the general rule for the blue tiles and find how many blue tiles are there in next pattern?

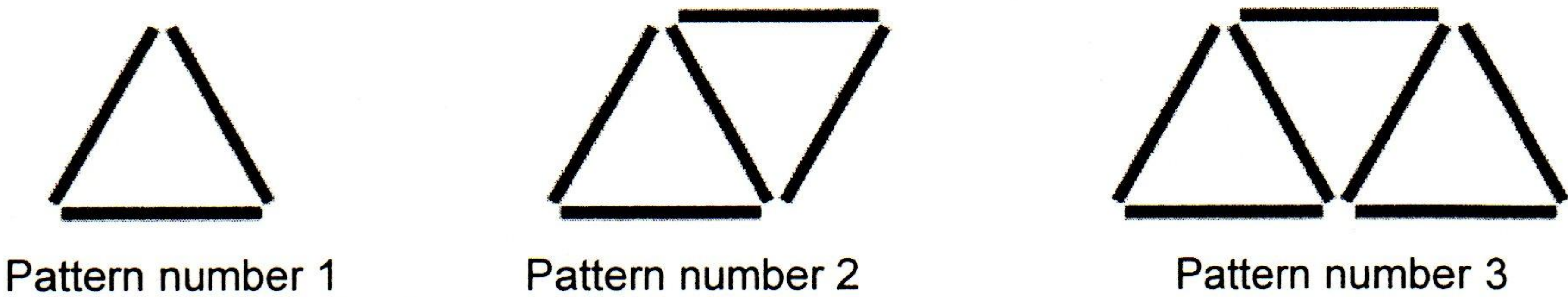


- ☐ $6n - 3$
- ☐ $3n - 2$
- ☐ $2z - x$

17. Look at these patterns. How many tiles will there be in pattern 12?



Here are some patterns made from sticks.



a) Complete the table.

Pattern number	1	2	3	4	5	6
Number of sticks	3	5	7			

b) How many sticks are in Pattern number 17? _____