

Grade 6 Math Assessment: Patterns & Linear Relationships Review

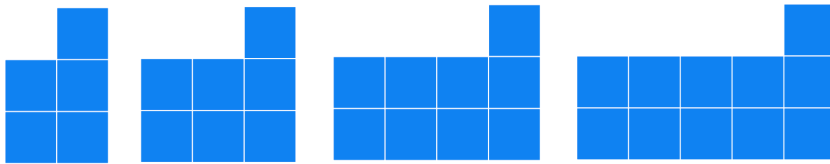
Total: 14 marks

Name: _____

Date: _____

Section A — Knowledge & Understanding (5 marks)

1. (2 marks) Look at the pattern of figures below:



a) What is the pattern rule in words?

b) Draw the next figure in the pattern.

2. (1 mark) What makes a pattern linear?

- A) It forms random shapes
- B) It doubles each time
- C) It increases by the same amount each time
- D) It changes by different amounts each time

Section B — Thinking (5 marks)

3. (3 marks) Consider the pattern: 3, 7, 11, 15, 19...

a) Write the pattern rule in words.

b) Write the algebraic rule (use n for term number).

c) What is the 10th term? Show your thinking.

Section C — Communication (4 marks)

4. (2 marks) Describe how a table of values can help you identify whether a pattern is linear.

5. (2 marks) The algebraic rule for a pattern is: Term value = $4n + 1$. Describe in words how this pattern grows.

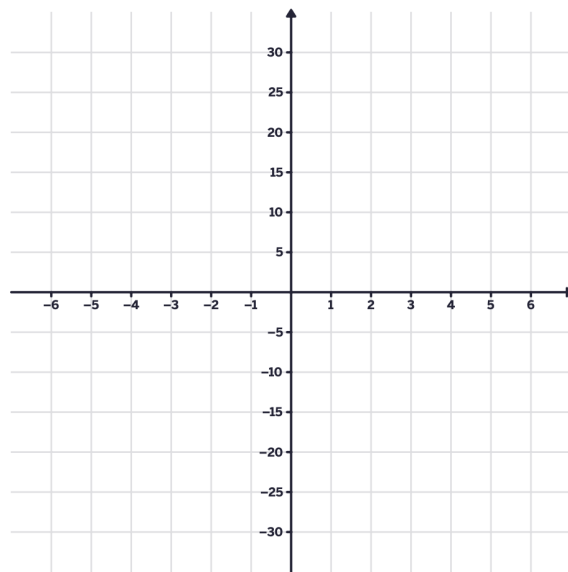
Section D — Application (6 marks)

6. (3 marks) A pattern rule is: "Start at 5 and add 6 each time."

a) Fill in the missing values:

Term 1: 5
Term 2: ____
Term 3: ____
Term 4: ____

b) Graph the pattern on a coordinate grid (n on x-axis, value on y-axis).



7. (3 marks) A linear pattern follows the rule: Term value = $3n - 2$.

a) What is the first term?

b) What is the fifth term?

c) For which term does the value equal 25?