

Grade 5 - Patterns and Ordered Pairs - Test

Common Core 5.OA.B.3 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This test covers numerical patterns, ordered pairs and graphing for Grade 5 (5.OA.B.3). It has 9 questions worth 20 points. You have 45 minutes. Show your terms and your ordered pairs. Use a ruler and a sharp pencil when you plot points. Calculators are not allowed.

About this test

- Grade: Grade 5
- Chapter: Patterns and Ordered Pairs
- Standards: 5.OA.B.3
- Time: 45 minutes
- Total: 20 points

Question 1 - Two rules [2 pts]

Pattern A: start at 0 and add 4. Pattern B: start at 0 and add 8. Write the first five terms of each pattern.

- Pattern A (1 point)
- Pattern B (1 point)

Question 2 - Ordered pairs [2 pts]

Pattern A: 0, 6, 12, 18, 24. Pattern B: 0, 2, 4, 6, 8. Write the five ordered pairs of corresponding terms.

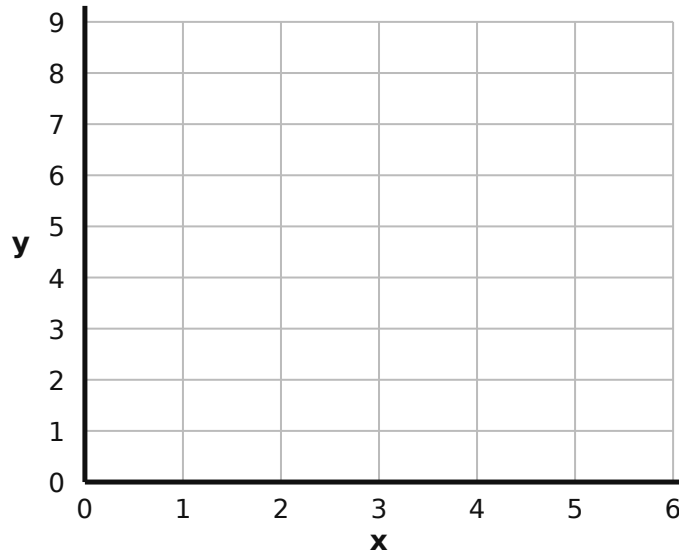
Question 3 - Relationship [2 pts]

Pattern A starts at 0 and adds 2. Pattern B starts at 0 and adds 10. Describe how the terms of B are related to the corresponding terms of A.

Question 4 - Graph the pattern [3 pts]

Pattern A: start at 0, add 2. Pattern B: start at 0, add 3. Use the first four terms of each pattern.

- Write the four ordered pairs. (1 point)
- Plot the four points on the plane. (2 points)



Coordinate plane.

Question 5 - Missing terms [2 pts]

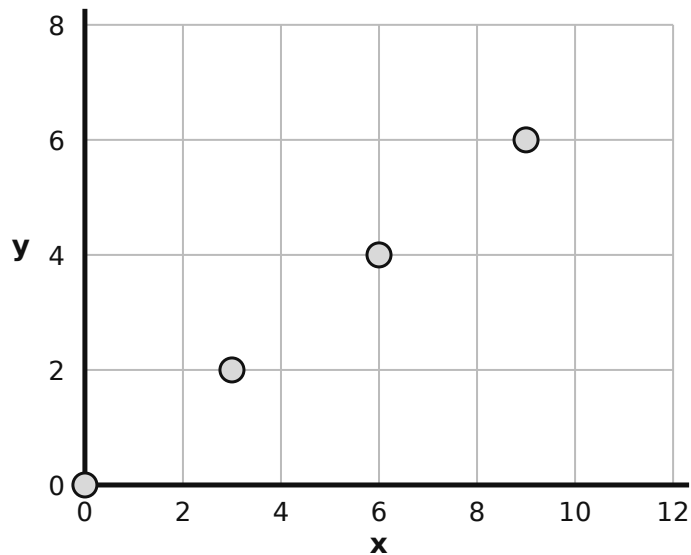
Pattern A starts at 0 and adds 5. Pattern B starts at 0 and adds 15. Find the missing numbers in the table.

A	0	5	10	?	20
B	0	15	?	45	60

Find the two ? values.

Question 6 - Read the graph [2 pts]

The graph shows corresponding terms of two patterns that start at 0. Write the rule for the first numbers and the rule for the second numbers. What is the second number when the first number is 12?



Points from two patterns.

Question 7 - Lemonade stand [3 pts]

Noah makes lemonade. Pitchers: start at 0, add 1. Cups of lemonade: start at 0, add 8.

- Write the ordered pairs for 0 to 4 pitchers. (2 points)
- How many cups does Noah make with 7 pitchers? (1 point)

Question 8 - Reading pages [3 pts]

Aisha reads at a steady pace. The table shows the first terms of the two patterns.

Minutes	0	10	20	30	40
Pages	0	4	8	12	16

Aisha's reading.

- How many pages does Aisha read in 60 minutes? (1 point)
- How many minutes does she need to read 20 pages? (2 points)

Question 9 - Is the pair correct? [1 pt]

Pattern A starts at 0 and adds 6. Pattern B starts at 0 and adds 10. Ethan says that (12,18) is a pair of corresponding terms. Is he correct? Explain.