

Grade 5 - Patterns and Ordered Pairs - Test Answer Key

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

Use this answer key to grade the patterns and ordered pairs test. Each solution shows the terms, the pairs and a scoring guide for partial credit. The total is 20 points. Give full credit to a correct answer even when the student explains it in different words.

Grade 5 · Common Core State Standards: **5.OA.B.3**

Question 1 - Two rules [2 pts]

(a) **0, 4, 8, 12, 16**

(b) **0, 8, 16, 24, 32**

Scoring: 1 point for each pattern. Take off the point if the first term is not 0 or any term is wrong.

Question 2 - Ordered pairs [2 pts]

Pair the terms in the same position, with the A term first.

(0,0),(6,2),(12,4),(18,6),(24,8)

Scoring: 2 points for all five pairs correct. 1 point for three or four correct pairs, or for all pairs written with the numbers in the wrong order.

Question 3 - Relationship [2 pts]

A: 0, 2, 4, 6. B: 0, 10, 20, 30. Each B term is $10 \div 2 = 5$ times the A term, because $10 = 5 \times 2$, $20 = 5 \times 4$, $30 = 5 \times 6$.

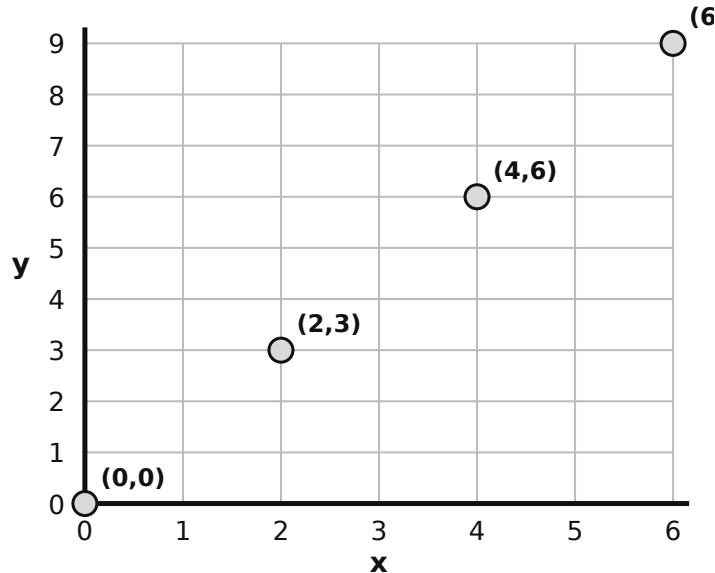
Answer: **each B term is 5 times the A term**

Scoring: 1 point for listing the terms, 1 point for the correct relationship (5 times).

Question 4 - Graph the pattern [3 pts]

(a) A: 0, 2, 4, 6. B: 0, 3, 6, 9. Pairs: $(0,0)$, $(2,3)$, $(4,6)$, $(6,9)$.

(b) Plot each pair: right the first number, up the second.



Solution graph.

Scoring: (a) 1 point for four correct pairs. (b) 2 points for four correct points; 1 point for two or three correct points.

Question 5 - Missing terms [2 pts]

A adds 5: $10+5=15$.

B adds 15: $15+15=30$.

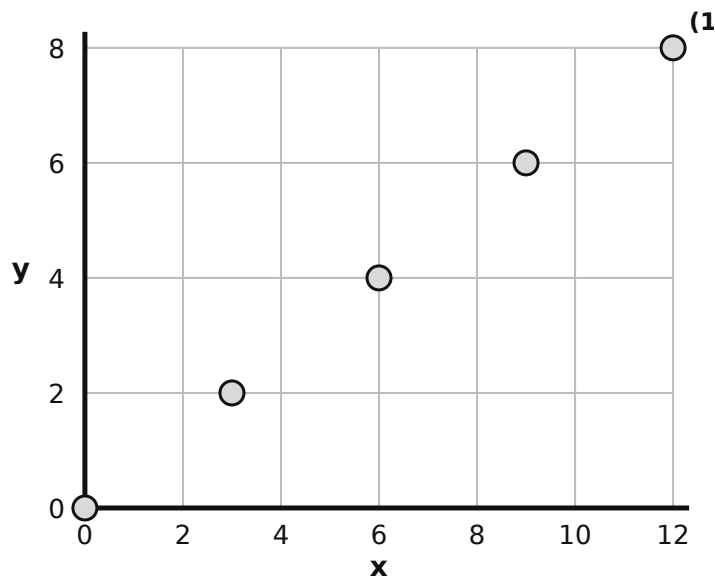
Answer: **15 and 30**

Scoring: 1 point for each missing number.

Question 6 - Read the graph [2 pts]

First numbers: 0, 3, 6, 9: start at 0, add 3. Second numbers: 0, 2, 4, 6: start at 0, add 2.

Next pair: first 12, second $6+2=8$. Answer: **8**



The next point is (12,8).

Scoring: 1 point for both rules, 1 point for 8.

Question 7 - Lemonade stand [3 pts]

(a) Pitchers: 0, 1, 2, 3, 4. Cups: 0, 8, 16, 24, 32. Pairs: (0,0),(1,8),(2,16),(3,24),(4,32) .

(b) Cups are 8 times the pitchers: $7 \times 8 = 56$. Noah makes **56 cups**.

Scoring: (a) 2 points for all five pairs, 1 point for four correct. (b) 1 point.

Question 8 - Reading pages [3 pts]

(a) Minutes add 10 and pages add 4. After 50 minutes she has read 20 pages. After 60 minutes: $16 + 4 = 20$, $20 + 4 = 24$. Answer: **24 pages**.

(b) Pages 16, 20: the next pair is (50,20). Answer: **50 minutes**.

Minutes	0	10	20	30	40	50	60
Pages	0	4	8	12	16	20	24

Extended table.

Scoring: (a) 1 point. (b) 2 points: 1 for continuing the pattern correctly, 1 for 50.

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

A: 0, 6, 12. B: 0, 10, 20. When A is 12, B is 20, not 18.

Answer: **No, the correct pair is (12,20).**

Scoring: 1 point for "no" with a correct reason.

Total
20 points