

Skip Counting & Patterns

Number & Operations · Grade 2

★ Hard · 13 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. Skip count by 6s. Write the first 8 numbers starting from 0.

Answer: _____

2. Skip count by 7s. Fill in the blanks:

7, 14, , 28, , 42

Answer: _____

3. What is the rule? Write the next two numbers:

5, 10, 20, 40, _, _

Answer: _____

4. Skip count backwards by 4s. Fill in the blanks:

40, 36, _, 28, _, 20

Answer: _____

5. Is 45 a number you say when counting by 6s from 0?

Explain how you know.

Answer: _____

6. Skip count by 8s. What are the first 6 numbers (not counting 0)?

Answer: _____

7. Fill in the missing numbers:

_, 27, 36, _, 54

Answer: _____

8. A machine packs 9 boxes every minute.
How many boxes after 7 minutes? (skip count by 9s)

Answer: _____

9. What number comes 5 steps before 45 when counting by 3s?

Answer: _____

10. Skip count by 11s. Fill in the blanks:

11, 22, _, 44, _, 66

Answer: _____

11. What is the pattern rule? Find the next two terms:

2, 6, 18, 54, _, _

Answer: _____

- 12.** Skip count by 9s backwards. Fill in the blanks:

90, 81, __, 63, __, 45

Answer: _____

- 13.** I skip count by a secret number. My sequence is:

15, 30, 45, 60, 75.

What is the secret number?

Answer: _____

Answer Key

Skip Counting & Patterns — Hard

1. 0, 6, 12, 18, 24, 30, 36, 42

Add 6 each time: 0, 6, 12, 18, 24, 30, 36, 42.

2. 21, 35

Add 7 each time: $14+7=21$, $28+7=35$.

3. 80, 160

The rule is $\times 2$ (double each time): $40 \times 2 = 80$, $80 \times 2 = 160$.

4. 32, 24

Subtract 4 each time: $36-4=32$, $28-4=24$.

5. No. 45 is not divisible by 6 ($6 \times 7 = 42$, $6 \times 8 = 48$, 45 is between them).

Check: 6, 12, 18, 24, 30, 36, 42, 48. Since 45 is not in the list, the answer is No.

6. 8, 16, 24, 32, 40, 48

Add 8 each time: 8, 16, 24, 32, 40, 48.

7. 18, 45

Pattern adds 9: $27-9=18$, $36+9=45$.

8. 63

Skip count by 9s seven times: 9, 18, 27, 36, 45, 54, 63.

9. 30

Count back 5 steps of 3: $45-3=42$, $42-3=39$, $39-3=36$, $36-3=33$, $33-3=30$.

10. 33, 55

Add 11 each time: $22+11=33$, $44+11=55$.

11. 162, 486

The rule is $\times 3$ (multiply by 3 each time): $54 \times 3 = 162$, $162 \times 3 = 486$.

12. 72, 54

Subtract 9 each time: $81 - 9 = 72$, $63 - 9 = 54$.

13. 15

Find the difference between terms: $30 - 15 = 15$. The secret number is 15.
