

Grade 4 · Factors, Multiples, Primes and Composites · Quiz

Common Core 4.OA.B.4 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

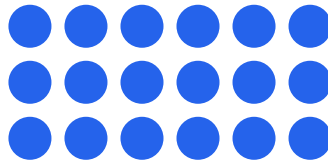
This 10-question quiz checks factors, multiples, factor pairs, and prime and composite numbers from standard 4.OA.B.4. Choose the one best answer for each question, then read the explanation to learn from any mistake.

Grade 4 Common Core: 4.OA.B.4

Questions

Question 1

The array shows $3 \times 6 = 18$. Which statement is true?



3 rows of 6 = 18

An array of 18 dots.

- A. 18 is a factor of 6
- B. 3 and 6 are factors of 18
- C. 3 and 6 are multiples of 18
- D. 3 is a multiple of 6

Question 2

Which list shows all the factors of 30?

- A. 1,2,3,5,6,10,15,30
- B. 1,2,3,5,6,10,30
- C. 1,2,3,5,6,10,15
- D. 2,3,5,6,10,15,30

Question 3

Which number is a multiple of 8?

- A. 52
- B. 64
- C. 78
- D. 90

Question 4

Which number is prime?

- A. 51
- B. 59
- C. 57
- D. 63

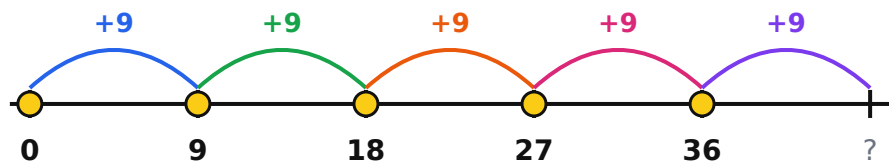
Question 5

Which number is composite?

- A. 2
- B. 17
- C. 31
- D. 39

Question 6

The number line shows hops of equal size. What number belongs at the question mark?



Skip counting by 9.

- A. 45
- B. 54
- C. 47
- D. 40

Question 7

How many factor pairs does 49 have?

1×49



7×7



The rectangles for 49 squares.

- A. 1
- B. 3
- C. 2
- D. 4

Question 8

Which number is a factor of 54 and also a multiple of 9?

- A. 12
- B. 36
- C. 18
- D. 6

Question 9

Why is 1 neither prime nor composite?

- A. It is an odd number
- B. It has no factors
- C. It has exactly three factors
- D. It has exactly one factor

Question 10

Liam saves each week and starts with nothing. Which amount could he have exactly?

Answer key

1. **B** – Numbers that multiply to give 18 are factors of 18, and 18 is their multiple. A common mistake is to reverse the words factor and multiple.
2. **A** – The pairs are 1×30 , 2×15 , 3×10 , and 5×6 . Common mistakes are leaving out 15, 30, or the factor 1.
3. **B** – Since $8 \times 8 = 64$, the number 64 is a multiple of 8. The numbers 52, 78, and 90 fall between multiples of 8.
4. **B** – The number 59 has only the factors 1 and 59. Each other choice has 3 as a factor: $51 = 3 \times 17$, $57 = 3 \times 19$, $63 = 3 \times 21$.
5. **D** – Since $3 \times 13 = 39$, the number 39 has more than two factors. The numbers 2, 17, and 31 are prime.
6. **A** – Each hop adds 9, so $36 + 9 = 45$. Choosing 54 skips a hop, and 40 or 47 do not follow the rule.
7. **C** – The pairs are 1×49 and 7×7 . The factors are 1, 7, and 49, so the number of pairs is 2, not the number of factors.
8. **C** – $54 = 18 \times 3$ and $18 = 9 \times 2$. The number 36 is a multiple of 9 but does not divide 54, and 6 divides 54 but is not a multiple of 9.
9. **D** – A prime has exactly two factors and a composite has more than two. The number 1 has only one factor, itself, so it fits neither.
10. **A** – The amounts are multiples of 7, and $7 \times 9 = 63$. The other choices lie between 56, 63, and 70.

Remember:

- A factor pair is two whole numbers that multiply to give the number, such as 4 and 9 for 36.
- Multiples are found by skip counting: the multiples of 6 are 6, 12, 18, 24, and so on.
- A prime number has exactly two factors; a composite number has more than two.
- The number 1 is neither prime nor composite, and 2 is the only even prime.
- To list every factor pair, test 1, 2, 3, and so on until the numbers meet.