

Factors & Prime Numbers

Numbers & Patterns · Grade 4

Score: _____ / 10

● Easy · 10 Questions

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

1. List all factors of 12.

Answer: _____

2. List all factors of 18.

Answer: _____

3. Is 7 a factor of 42?

Answer: _____

4. Is 24 a prime or composite number?

Answer: _____

5. Is 17 prime or composite?

Answer: _____

6. List all factors of 30.

Answer: _____

7. How many factors does 16 have?

Answer: _____

8. What is a prime number? Give two examples.

Answer: _____

- 9.** List all factors of 10.

Answer: _____

- 10.** Is 11 prime or composite?

Answer: _____

Answer Key

Factors & Prime Numbers — Easy

1. 1, 2, 3, 4, 6, 12

Find all pairs: 1×12 , 2×6 , 3×4 . Factors: 1, 2, 3, 4, 6, 12.

2. 1, 2, 3, 6, 9, 18

Pairs: 1×18 , 2×9 , 3×6 . Factors: 1, 2, 3, 6, 9, 18.

3. Yes. $42 \div 7 = 6$.

$42 \div 7 = 6$ with no remainder. So 7 is a factor of 42.

4. Composite (it has factors other than 1 and itself: 2, 3, 4, 6, 8, 12).

A composite number has more than 2 factors. 24 has many factors, so it is composite.

5. Prime (factors: only 1 and 17).

17 cannot be divided evenly by anything except 1 and 17. It is prime.

6. 1, 2, 3, 5, 6, 10, 15, 30

Pairs: 1×30 , 2×15 , 3×10 , 5×6 . Factors: 1, 2, 3, 5, 6, 10, 15, 30.

7. 5 factors (1, 2, 4, 8, 16)

Pairs: 1×16 , 2×8 , 4×4 . That's 5 factors: 1, 2, 4, 8, 16.

8. A prime number has exactly 2 factors: 1 and itself. Examples: 2, 3, 5, 7, 11, etc.

Primes have only two factors. Smallest primes: 2, 3, 5, 7, 11, 13...

9. 1, 2, 5, 10

Pairs: 1×10 , 2×5 . Factors: 1, 2, 5, 10.

10. Prime

11 has only factors 1 and 11. Prime.