

Factors & Prime Numbers

Numbers & Patterns · Grade 4

◆ Medium · 10 Questions

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

1. Is 91 prime or composite? Explain.

Answer: _____

2. Find all prime numbers between 20 and 40.

Answer: _____

3. List all factors of 24.

Answer: _____

4. List all factors of 36.

Answer: _____

5. Is 53 prime or composite?

Answer: _____

6. Is 39 prime or composite?

Answer: _____

7. List the first 5 multiples of 7.

Answer: _____

8. List the first 4 multiples of 9.

Answer: _____

9. Is 48 a multiple of 8?

Answer: _____

10. What is the smallest prime number?

Answer: _____

Answer Key

Factors & Prime Numbers — Medium

1. Composite. $91 = 7 \times 13$.

Try dividing by small primes: $91 \div 7 = 13$. So $91 = 7 \times 13$. Composite.

2. 23, 29, 31, 37

Check each: $21 = 3 \times 7$, $22 = 2 \times 11$, 23 prime, $24 = 2^3 \times 3$, $25 = 5^2$, $26 = 2 \times 13$, $27 = 3^3$, $28 = 2^2 \times 7$, 29 prime, $30 = 2 \times 3 \times 5$, 31 prime, $32 = 2^5$, $33 = 3 \times 11$, $34 = 2 \times 17$, $35 = 5 \times 7$, $36 = 2^2 \times 3^2$, 37 prime, $38 = 2 \times 19$, $39 = 3 \times 13$.

3. 1, 2, 3, 4, 6, 8, 12, 24

Pairs: 1×24 , 2×12 , 3×8 , 4×6 .

4. 1, 2, 3, 4, 6, 9, 12, 18, 36

Pairs: 1×36 , 2×18 , 3×12 , 4×9 , 6×6 .

5. Prime

53 has no factors except 1 and 53.

6. Composite. $39 = 3 \times 13$.

$39 \div 3 = 13$.

7. 7, 14, 21, 28, 35

7×1 , 7×2 , 7×3 , 7×4 , 7×5 .

8. 9, 18, 27, 36

9×1 , 9×2 , 9×3 , 9×4 .

9. Yes ($48 \div 8 = 6$)

$48 \div 8 = 6$ with no remainder.

10. 2

2 is the smallest prime (and the only even prime).
