



Name: _____

Date: _____

1. What is the greatest common factor (GCF) of 20 and 18?

2. What is the least common multiple (LCM) of 4 and 10?

20

16

40

24

3. How many factors does 40 have?

10

8

9

6

4. What is the prime factorization of 18?

 $2 \times 3 \times 3$ $2 \times 2 \times 5$ $2 \times 2 \times 3$ $2 \times 2 \times 2 \times 3$

5. 14 red and 14 blue beads are split into identical groups with no beads left over. What is the GREATEST number of groups?



6. The chart lists the factors of 12 and 30, with shared factors in green. What is their greatest common factor?

Factors (shared in green, GCF = 6)

12:	1	2	3	4	6	12		
30:	1	2	3	5	6	10	15	30

7. What is the greatest common factor (GCF) of 48 and 8?

8. What is the least common multiple (LCM) of 8 and 6?

16

48

32

24

9. How many factors does 36 have?

9

10

7

8

10. What is the prime factorization of 30?

$2 \times 2 \times 5$

$2 \times 3 \times 5$

$2 \times 3 \times 3$

$2 \times 2 \times 3$



11. 20 red and 15 blue beads are split into identical groups with no beads left over. What is the GREATEST number of groups?

12. The chart lists the factors of 6 and 10, with shared factors in green. What is their greatest common factor?

Factors (shared in green, GCF = 2)

6:	1	2	3	6
10:	1	2	5	10

13. What is the greatest common factor (GCF) of 48 and 18?

6 12 5 7

14. What is the least common multiple (LCM) of 3 and 10?

40 33 27 30

15. How many factors does 12 have?

6 4 7 8



16. What is the prime factorization of 24?

$2 \times 2 \times 5$

$2 \times 3 \times 3$

$2 \times 2 \times 3$

$2 \times 2 \times 2 \times 3$

17. 35 red and 49 blue beads are split into identical groups with no beads left over. What is the GREATEST number of groups?

7

14

8

6

18. The chart lists the factors of 6 and 9, with shared factors in green. What is their greatest common factor?

Factors (shared in green, GCF = 3)

6:

1

2

3

6

9:

1

3

9



Answer Key

1. **2** GCF of 20 and 18 is 2.
2. **20** LCM of 4 and 10 is 20.
3. **8** Factors of 40: 1, 2, 4, 5, 8, 10, 20, 40 - that is 8.
4. **$2 \times 3 \times 3$** $18 = 2 \times 3 \times 3$.
5. **14** The greatest number of equal groups is the GCF of 14 and 14 = 14.
6. **6** Shared factors of 12 and 30: 1, 2, 3, 6. The greatest is 6.
7. **8** GCF of 48 and 8 is 8.
8. **24** LCM of 8 and 6 is 24.
9. **9** Factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36 - that is 9.
10. **$2 \times 3 \times 5$** $30 = 2 \times 3 \times 5$.
11. **5** The greatest number of equal groups is the GCF of 20 and 15 = 5.
12. **2** Shared factors of 6 and 10: 1, 2. The greatest is 2.
13. **6** GCF of 48 and 18 is 6.
14. **30** LCM of 3 and 10 is 30.
15. **6** Factors of 12: 1, 2, 3, 4, 6, 12 - that is 6.
16. **$2 \times 2 \times 2 \times 3$** $24 = 2 \times 2 \times 2 \times 3$.
17. **7** The greatest number of equal groups is the GCF of 35 and 49 = 7.
18. **3** Shared factors of 6 and 9: 1, 3. The greatest is 3.