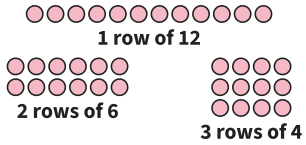
Factors, multiples and primes

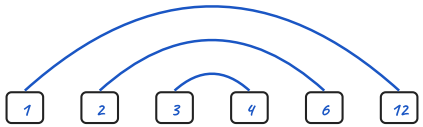
ANSWERS

1

List all the factors of 12.



1 × 12 = 12
2 × 6 = 12
3 × 4 = 12



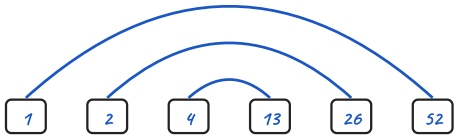
Stop when the pairs meet in the middle.

Factors 1, 2, 3, 4, 6, 12

2

List all the factors of 52.

1 × 52 = 52
2 × 26 = 52
4 × 13 = 52

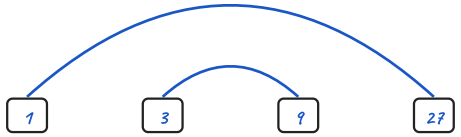


Factors 1, 2, 4, 13, 26, 52

3

List all the factors of 27.

1 × 27 = 27
3 × 9 = 27

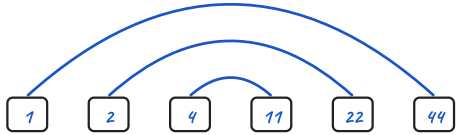


Factors 1, 3, 9, 27

4

List all the factors of 44.

1 × 44 = 44
2 × 22 = 44
4 × 11 = 44

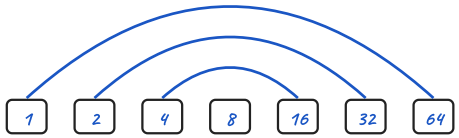


Factors 1, 2, 4, 11, 22, 44

5

List all the factors of 64.
How many factors does 64 have?

1 × 64 = 64
2 × 32 = 64
4 × 16 = 64
8 × 8 = 64



Factors 1, 2, 4, 8, 16, 32, 64

How many? 7

6

Write down the first five multiples of 9.
Is 50 a multiple of 9?
Explain how you know.

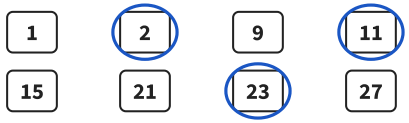


9 × 5 = 45 and 9 × 6 = 54

Is 50? No, it is between 45 and 54

7

A prime number has exactly two factors.
Ring the prime numbers.



1 has only one factor.

9, 15, 21, 27 have more than two.

Primes 2, 11, 23

8

Sam lists the factor pairs of 60 as they come to mind: 2 × 30, 6 × 10, 3 × 20, 1 × 60, 5 × 12. Sam has missed a pair. Which one?

In order: 1 × 60, 2 × 30, 3 × 20,
4 × 15, 5 × 12, 6 × 10

Missed 4 × 15

Factors, multiples and primes *further practice*

ANSWERS

9

List all the factors of **56**.

1 × 56, 2 × 28,
4 × 14, 7 × 8

Factors 1, 2, 4, 7, 8, 14, 28, 56

10

A bus leaves the station every 8 minutes. The first bus leaves at 9:00. Write down the times of the next four buses.

multiples of 8: 8, 16, 24, 32

Times 9:08, 9:16, 9:24, 9:32

11

A choir of 42 singers stands in equal rows, with nobody left over. Write down every number of rows they could make.

1 × 42, 2 × 21, 3 × 14, 6 × 7

Rows 1, 2, 3, 6, 7, 14, 21, 42

12

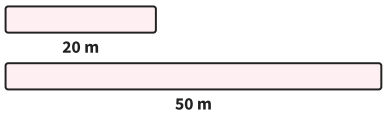
Ring all the prime numbers from 20 to 40.

20	21	22	**23**	24	25	26
27	28	**29**	30	**31**	32	33
34	35	36	**37**	38	39	40

Primes 23, 29, 31, 37

13

Two lengths of fencing are 20 m and 50 m. Both are cut into pieces of the same whole number of metres, with nothing left over. What lengths could the pieces be?



common factors of 20 and 50

Lengths 1, 2, 5, 10 m

14

Find the number between 40 and 60 that has an odd number of factors.

square numbers: 7 × 7 = 49
factors 1, 7, 49

Answer 49

15

I am a multiple of 6. I am also a factor of 60. I am between 15 and 50. What number am I?

multiples of 6 that go into 60:
6, 12, 30, 60

Answer 30

16

Zara says 51 is a prime number, because it is odd and it is not in the 2, 5 or 10 times tables. Is Zara right? Explain.

3 × 17 = 51, so 51 has
four factors: 1, 3, 17, 51

Answer No, 3 × 17 = 51