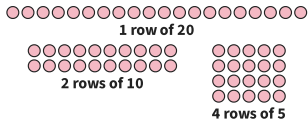


Listing Factors

ANSWERS

1

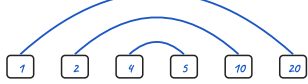
List all the factors of 20.



$$1 \times 20 = 20$$

$$2 \times 10 = 20$$

$$4 \times 5 = 20$$



Stop when the pairs meet in the middle.

Factors 1, 2, 4, 5, 10, 20

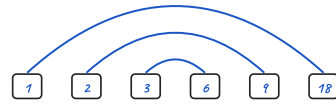
2

List all the factors of 18.

$$1 \times 18 = 18$$

$$2 \times 9 = 18$$

$$3 \times 6 = 18$$



Factors 1, 2, 3, 6, 9, 18

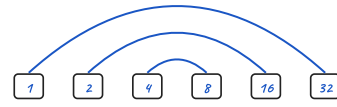
3

List all the factors of 32.

$$1 \times 32 = 32$$

$$2 \times 16 = 32$$

$$4 \times 8 = 32$$



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

4

List all the factors of 30.

$$1 \times 30 = 30$$

$$2 \times 15 = 30$$

$$3 \times 10 = 30$$

$$5 \times 6 = 30$$



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

5

List all the factors of 36.

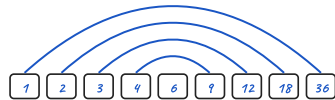
$$1 \times 36 = 36$$

$$2 \times 18 = 36$$

$$3 \times 12 = 36$$

$$4 \times 9 = 36$$

$$6 \times 6 = 36$$



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

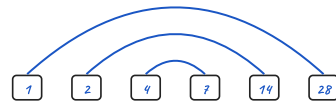
6

List all the factors of 28.

$$1 \times 28 = 28$$

$$2 \times 14 = 28$$

$$4 \times 7 = 28$$



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

7

Stella has 24 chairs. She puts them in equal rows. Write down every number of rows she could make.

the factors of 24

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

8

A number has exactly two factors. One of them is 13. What is the number?

its factors are 1 and 13

Answer 13

Listing Factors further practice

ANSWERS

9

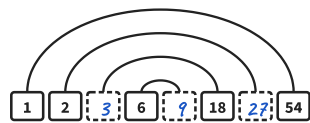
List all the factors of 48.

$$1 \times 48, 2 \times 24, 3 \times 16, 4 \times 12, 6 \times 8$$

Factors 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

10

The factor rainbow shows all the factors of 54. Three of them are missing. Fill them in.



$$2 \times 27, 3 \times 18, 6 \times 9$$

11

Which of these numbers are factors of 72?

6, 9, 14, 16, 24

$$72 = 6 \times 12 = 9 \times 8 = 24 \times 3$$

Answer 6, 9, 24

12

A rectangle has an area of 30 cm². Its length and width are whole numbers of centimetres. Write down all the possible lengths and widths.

the factor pairs of 30

Answer 1 × 30, 2 × 15, 3 × 10, 5 × 6

13

A teacher splits 45 pupils into teams of equal size, with no pupils left over. Each team must have between 4 and 10 pupils. How many pupils could be in each team? Give every answer.

factors of 45: 1, 3, 5, 9, 15, 45

Answer 5 or 9

14

Find the number between 20 and 30 that has exactly three factors.

25: 1, 5, 25

Answer 25

15

Kai has 24 red beads and 36 blue beads. He uses all of the beads to make more than one bracelet. The bracelets are all exactly the same. How many bracelets could he make? Give every answer.

common factors of 24 and 36

Answer 2, 3, 4, 6, 12

16

Priya says a bigger number always has more factors than a smaller number. Is Priya right? Explain, with an example.

12 has 6 factors but 13 has only 2

Answer No