

Finding the Total with Arrays

An array is an arrangement of objects in columns and rows. Arrays can be used to visualize multiplication. For instance, in this array you have 12 stars arranged in 4 equal rows with 3 stars in each row.



Here is the multiplication sentence that describes this array:

$$4 \times 3 = 12$$

Number of groups Number of objects in each group Total number of objects

Check out some of the other ways you can arrange these 12 stars. Record the number of rows, objects in each row, and multiplication sentence for each array.

1



number of rows: 3

number of columns: 4

multiplication sentence: $3 \times 4 = 12$

2



number of rows: 2

number of columns: 6

multiplication sentence: $2 \times 6 = 12$

3



number of rows: 1

number of columns: 12

multiplication sentence: $1 \times 12 = 12$

4



number of rows: 6

number of columns: 2

multiplication sentence: $6 \times 2 = 12$