

Practice

Complete the factor pairs for 12

 $1 \times \square = 12$

 $\square \times 6 = 12$

 $\square \times \square = 12$

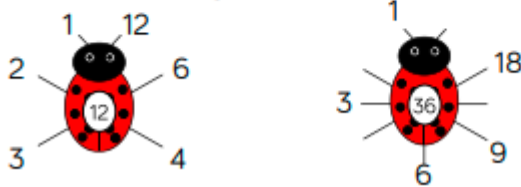
12 has ___ factor pairs. 12 has ___ factors altogether.

Use counters to create arrays for 24

How many factor pairs can you find?

Here is an example of a factor bug for 12

Complete the factor bug for 36



Are all the factors in pairs?

Draw your own factor bugs for 16, 48, 56 and 35

Reasoning

Tommy says



The greater the number, the more factors it will have.

Is Tommy correct?

You should use trial and error methods to explain / find answers.

Problem Solving

Some numbers are equal to the sum of all their factors (not including the number itself).

e.g. 6

6 has 4 factors, 1, 2, 3 and 6

Add up all the factors not including 6 itself.

$$1 + 2 + 3 = 6$$

6 is equal to the sum of its factors (not including the number itself)

How many other numbers can you find that are equal to the sum of their factors?

Which numbers are less than the sum of their factors?

Which numbers are greater than the sum of their factors?