

1.3. Factors and divisibility

Remember

Factors of a number divide exactly into the number. They can be arranged in order or in pairs, for example:
 Factors of 12: 1, 2, 3, 4, 6 and 12
 Factors pairs for 12: 1 and 12, 2 and 6, 3 and 4
 A number is divisible by:
 100 if the last two digits are 00.
 10 if the last digit is 0.
 5 if the last digit is 0 or 5.
 2 if the last digit is 0, 2, 4, 6 or 8.

1) Write the factors of these numbers, in order.

8
.....

9
.....

15
.....

2) Write the factors of these numbers, in pairs.

24
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28
.....

32
.....

3) Sometimes it is important to find all the factors of a number so you need be systematic.

Here is a factor bug. The factors of 24 are written on its legs.

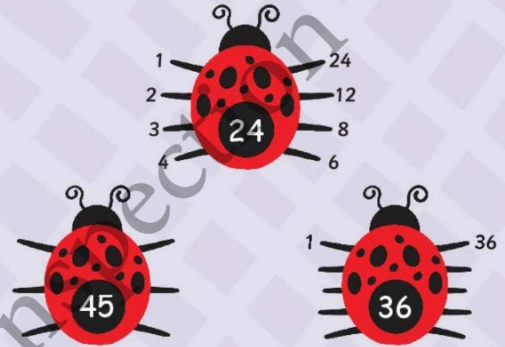
What happens if you try to divide 24 by 5? There is a remainder.

What happens if you divide 24 by 6? (You have already written the pair of factors.)

When you reach the stage where factor pairs are repeating, you can be sure you have found all the factors.

Now write them in order:

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



Now complete factor bugs for 36 and 45.

Hint: working with factor bugs helps to make sure you have found all the factors.