

Abundant Numbers

Age 7 to 11
Challenge Level ★



To find the **factors** of a number, you have to find **all** the pairs of numbers that multiply together to give that number.

The factors of 48 are:

1 and 48

2 and 24

3 and 16

4 and 12

6 and 8

If we leave out the number we started with, 48, and add all the other factors, we get 76:

$$1 + 2 + 3 + 4 + 6 + 8 + 12 + 16 + 24 = 76$$

So 48 is called an **abundant** number because it is less than the sum of its factors (without itself). (48 is less than 76.)

See if you can find some more abundant numbers!