

Factors & Common Factors

Step 1

A factor is a number that divides into another number exactly and we often talk about factor pairs. These are the pair of numbers that when multiplied together give us the number as the product (answer).

For example:

$$\text{Factors of 12} = 1 \times 12$$

$$2 \times 6$$

$$3 \times 4$$

Step 2

Then list your factor pairs in ascending order, ignoring any duplicates.

$$\text{Factors of 12} = 1, 2, 3, 4, 6, 12$$

Step 3

To find the common factors, find the factor pairs of both numbers.

$$8 = 1 \times 8 \quad 12 = 1 \times 12$$

$$2 \times 4 \quad 2 \times 6$$

$$3 \times 4$$

Step 4

Circle the numbers that appear in both lists. These are your common factors.

$$\text{Common factors of 8 and 12} = 1, 2, 4$$

| Factors of: | Answer |
|-------------|--------|
| 8 | |
| 35 | |
| 16 | |
| 40 | |
| 24 | |
| 64 | |

| Greatest common factor (GCF) | Answer |
|------------------------------|--------|
| 12 and 18 | |
| 30 and 48 | |
| 36 and 45 | |
| 18 and 21 | |
| 9 and 20 | |
| 28, 56 and 70 | |