



GCF & LCM

Splitting up, and lining up

- Today: find both — and know which one a problem is asking for.

Two very different questions

- 36 apples and 48 oranges into equal gift bags, none left over.
- Buses leaving every 6 and every 8 minutes — when together again?

Turn & talk: are these the same kind of question?

GCF splits. LCM lines up.

- **GCF** = biggest number that divides INTO both → equal groups, nothing left over
- **LCM** = smallest number both divide into → repeating cycles meeting

GCF of 12 and 18

- Factors of 12: 1, 2, 3, 4, 6, 12
- Factors of 18: 1, 2, 3, 6, 9, 18

Greatest shared = 6 (not 2, not 3)

LCM of 4 and 6

- Multiples of 4: 4, 8, 12, 16...
- Multiples of 6: 6, 12, 18...

First shared = 12 (not 24 — they share a factor)

Your turn

- Find the GCF of 24 and 36.
- Thumbs up when you have it.

How to tell which one

- Splitting into equal groups? → **GCF** (answer is smaller than your numbers)
- Events repeating until they meet? → **LCM** (answer is bigger than your numbers)

Check your answer's size — it tells you if you picked right.

Now you

- → In-class practice sheet