

Mental Division

Mental division is a way of dividing numbers in your head without writing anything down. It can seem tricky at first, but with some practice, it becomes easier!

Here's how you can think about dividing in your mind:

Steps:

1. **Start with simple numbers:** First, try to divide numbers that are easy to break apart. For example, if you are dividing 36 by 6, think: "How many times does 6 go into 36?"
 - You can use what you know about multiplication. Since $6 \times 6 = 36$, you know that $36 \div 6 = 6$.
2. **Break the numbers apart:** If the number is bigger, break it into smaller parts. For example, if you are dividing 48 by 4, you can split 48 into two smaller parts: 40 and 8.
 - First, divide 40 by 4 (which is 10).
 - Then divide 8 by 4 (which is 2).
 - Add the two answers together: $10 + 2 = 12$, so $48 \div 4 = 12$.
3. **Use multiplication facts you know:** To help with division, think about multiplication. If you know $5 \times 5 = 25$, then you can quickly figure out that $25 \div 5 = 5$. The more multiplication facts you remember, the faster you'll be at mental division!
4. **Estimate first:** If you're not sure, estimate the answer by rounding. For example, if you're dividing 83 by 4, you could round 83 to 80. Since $80 \div 4 = 20$, you know the answer will be close to 20. Then, you can adjust your answer from there.

Example Problem:

Let's try dividing 72 by 9 in your head.

- Think: "How many times does 9 go into 72?"
- If you remember your multiplication facts, $9 \times 8 = 72$, so $72 \div 9 = 8$.

Mental division becomes easier the more you practice and use your multiplication facts. Keep practicing, and soon you'll be able to divide numbers in your head quickly!