Subtracting Negative Numbers

Ever racked your brain to think of another way to explain subtracting negative numbers to students?

At a recent Silver Wedding celebration, we were comparing stories about children with no money sense. "Hannah has the weirdest logic" said Tessa. "She wanted to go on holiday so I told her 'You've no money'.

'Yes I have' she replied 'I've got £200.' 'No you haven't, you've got an overdraft'.

'Yes, I've got an overdraft of £1800 and a limit of £2000 so I've got £200'."

Now that seemed straightforward enough, but it stayed in the back of my mind – how do you get £200 from two negative numbers?

Suppose Hannah had one of those special interest accounts where you have to keep a minimum sum – say £500. She's got £700 in total, so how much can she spend? That's easy –

£700 - £500 = £200

But instead of £700, she's got ⁻£1800 and instead of £500 she can go to ⁻£2000. So now the sum is

⁻£1800 - ⁻£2000 = £200

because (as everyone knows!) two negatives make a positive.

Is it still easy?

Postscript

My son when he left home opened a bank account and came to me with this problem.

"Every time, I put money in my balance goes down and every time I take money out my balance goes up. It's so weird."

I looked at his statement.

"You're overdrawn, Daniel".

To be fair banks used to print overdrawn statements in red not just stick in a tiny minus sign as they do nowadays.

ↂ *RG 06/00*