

In Charlie's Bank you are only allowed to **deposit £2** at a time and **withdraw £3** at a time.

Imagine Alison deposits £2, another £2, another £2, another £2 and then finally withdraws £3. She now has an extra £5 in her account.

What other amounts of money is it possible for Alison to change her account balance by?

Charlie's Bank wants to change its rules whilst ensuring that its customers can still change their account balance by any total.

If Alison is only allowed to **deposit £3** at a time and **withdraw £7** at a time, will she be able change her account balance by any total?

Explore some other deposit and withdrawal amounts.

If Alison is allowed to **deposit £x** and **withdraw £y**, what has to be true about x and y to make sure it is possible to change the account balance by any total?