

Subtracting Negative Numbers

I know $8 + 5 = 13$

but why does $8 - ^{-}5 = 13$ as well ?

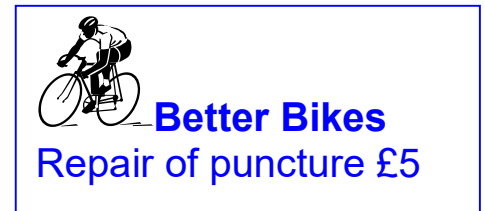
Suppose John has £13 plus a bill for £5 (*repairs to his bike*). He effectively has £8 net, because at sometime he has to pay the bill.



Now if

- a) Rich Uncle George gives him £5; he can pay the bill and still have £13 in his pocket.

or



- b) Generous Aunt May could say “Let me have that bill for £5, John, I’ll pay it for you”, in which case he again has £13 in his pocket.

Uncle giving him +£5 (*the note*) or Auntie taking away –£5 (*the bill*) has the same end result – John has £13 left to spend on himself.