

1. Explain in Alphetian terms the mathematical thinking that allows one to add BD and DC.

1) First you'd use your manipulatives and set out B fens, and d singles to equal BD. For DC you'd set out d fens and c singles. Next you'd add both together. Your fens add up to A fundred with A fen left. Your singles add up to A fen and B singles left. Your total ends up being ABB.

1. When adding BD to DC, I first began by drawing pictures. BD was represented by B Longs and D single squares. DC was represented by D Longs and C single squares. When I added the numbers I ended up with AB singles and AA longs. Since I had AB singles, I could change them into A long and B singles. I changed the AA longs into A flat and A long. I then added this all together to get A flat, B longs, and B singles. This translates to be ABB.

2. Explain in Alphetian terms the mathematical thinking that allows one to subtract CD from BOA.

2.) First you'd use your manipulatives and set out B fundreds, and A singles to represent BOA. Then you'd set out C fens and D singles and set them aside. Now you'd use your BOA that's set out in front of you and subtract the same amount that you have aside in the CD. C fens minus A fundred is B fens. D singles minus A fens equals A singles. So you have A fundreds, A fens, and B singles left.

2. In order to solve BOA-CD, I drew a picture again. This time BOA was represented by B Flats and A single squares. CD was represented by C Longs and D single squares. I first began by subtracting the single squares. This was only possible if I converted a long into fen squares because D is larger than A. Since I had no longs in the BOA picture, I had to change A flat into fen longs. I then took A long and changed it into fen single squares. I could then subtract D squares from the AA squares. This left me with B single squares. After I changed A long into fen squares, I was left with D longs on top and subtracted C longs from that. This left me with A long. In the flats place I only had A flat, and nothing was subtracted from it, so I ended with A flat. My final answer was AAB.