Lesson 10

Subtracting From Bigger Numbers

*This is the quick guide to the video. For more
complete details watch video 10.*

Goals:

- To show how to repeatedly subtract a single digit number from a much larger number.

Method

The "trick" here is quite simple. It has to do with how we view and name our number. Suppose we want to subtract 8's repeatedly from 364.

This is the set up for 364 - 8. Three $100 bills, six $10 bills and four $1 coins.

We don't work with that.

Instead we change the set up so we only have two columns to deal with - the units and the tens:

3 6	4
-	8

Each $100 bill can be exchanged for TEN $10 bills.

So three $100 bills will become thirty $10 bills.

Add that to the six $10 bills already there

and we have thirty-six $10 bills in total

(as shown above)

Now we can use the Add a Complement strategy per normal.

We simply call the number "thirty-six"   "four"

(compare to "seventy four")

(For the technical minded we are working in Base 100)

Our working goes like this:

3 6	4		
-	8		
3 5	6		*Can't take 8 from 4. Drop 36 to 35. Add 2 to 4 to get 6.*
3 4	8		*Can't ake 8 from 6. Drop 35 to 34. Add 2 to 6 to get 8.*
3 4	0		*8 less 8 is 0. Leave 34 as is.*

3 3	**2**		*Can't take 8 from 0. Drop 34 to 33. Add 2 to 0 to get 2*

We say:

thirty-six four less 8 is

thirty-five six

less 8 is

thirty-four eight

less 8 is

thirty-four oh

less 8 is

thirty-three two... and so on.

Note
We will shortly show how to
do long subtractions of any length
any order. This is a quick fix for now!