Worked Example 3B

A string is cut into four pieces A, B, C and D.

Three of the pieces add up to 100 cm long.

Which are the three pieces of string?

A	B	C	D
25 cm	43 cm	22 cm	32 cm

We make a reasonable guess of the 3 pieces, then check if they add up to 100 cm long.

*The digit '0' should be in the ones place of the total.

Guess 1: A, B and C

$(5 + 3 + 2 = 1\underline{0})$

> Look for 3 ones digits that add up to '0'.

Check 1: 25 + 43 + 22 = 90 cm X

Guess 2: A, B and D

$(5 + 3 + 2 = 1\underline{0})$

Check 2: 25 + 43 + 32 = 100 cm √

The three pieces are A, B and D.