



NAME _____

DATE _____

RELATE ADDITION AND SUBTRACTION LENGTHS

Apply conceptual understanding of measurement by solving two step word problems.

- 1) Steven has black leather strip that is 13 centimeters long. He cut off 5 centimeters. His teacher gave him a brown leather strip that is 16 centimeters long what is the total length of both strips?

Solution:

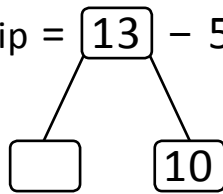
Length of leather black strip = ___ centimeters long.

He cuts off ___ centimeters.

A brown leather strip given by the teacher ___ centimeters.

Step 1:

Remaining black strip = $13 - 5$.



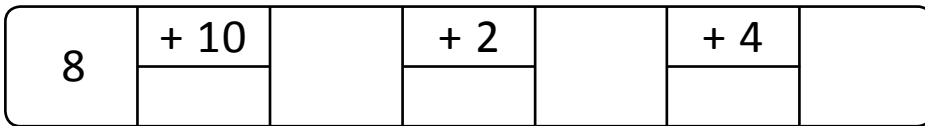
$$10 - 5 = \underline{\quad}$$

$$\underline{\quad} + 3 = \underline{\quad}$$

Step 2:

Now the total length of the strips = $8 + 16 = \underline{\quad}$ centimeters long.

By tape diagram:



- 2) The length of a crayon is 9 centimeters. A pencil is 11 centimeters longer than the crayon. What is the total length of both the crayon and the pencil?

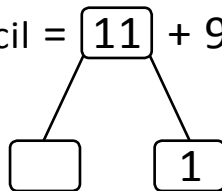
Solution:

The length of a crayon is ___ centimeters.

A pencil is ___ centimeters longer than the crayon.

Step 1:

The length of the pencil = $11 + 9$.



$$9 + \underline{\quad} = 10.$$

$$\underline{\quad} + \underline{\quad} = 20 \text{ centimeters.}$$

Step 2:

Total length of both crayon and the pencil = $20 + 9 = \underline{\quad}$.

(OR)

By tape diagram:

