## RELATE ADDITION AND SUBTRACTION LENGTHS

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

1) Jesse's doll is 30 centimeter tall. Sarah's doll is 9 centimeter shorter than Jessie's doll. What is the total length of both dolls?
Solution:
Jesse's doll is $\qquad$ centimeters tall.

Sarah's doll is $\qquad$ centimeters shorter than Jessie's doll.

## Step 1:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

9 centimeters cut off.
Sarah's doll is $=$ $\qquad$ centimeters.

## By tape diagram:

| 30 | -10 |  | +1 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

Step 2:
Length of both dolls $=30+21=$ $\qquad$ centimeters long.

## By tape diagram:



