



NAME \_\_\_\_\_

DATE \_\_\_\_\_

## RELATE ADDITION AND SUBTRACTION LENGTHS

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

1) Joanna and Lisa drew lines. Joanna's line is 41 centimeters long. Lisa's line is 19 centimeters longer than Joanna's. How long are Joanna and Lisa's lines?

**Solution:**

**Step 1:** Find the length of Lisa's line.

Joanna's line is \_\_\_ centimeters long.

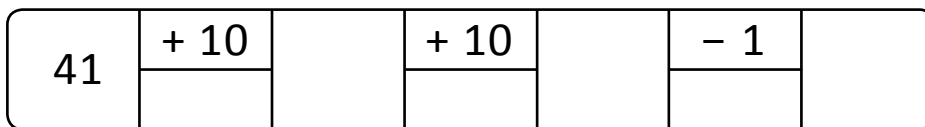
Lisa's line is \_\_\_ centimeters longer than Joanna's.

Length of Lisa's line =  $41 + 19 =$  \_\_\_ centimeters.

$$\begin{array}{c}
 \boxed{41} + 19 = \text{___} \text{ centimeters.} \\
 \swarrow \quad \searrow \\
 \boxed{40} \quad \boxed{\phantom{00}} \\
 1 + \text{___} = 20 \\
 \text{___} + \text{___} = 60.
 \end{array}$$

(OR)

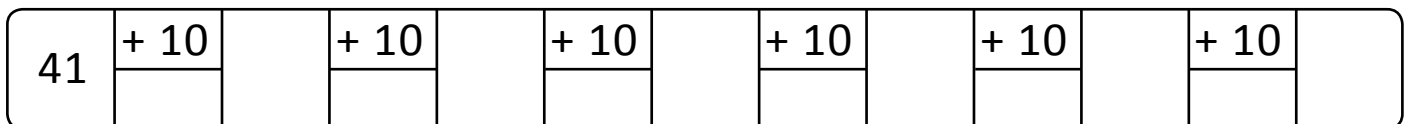
**By tape diagram:**



**Step 2:** Total length of their lines.

**By tape diagram:**

$$41 + 60 = \text{___}.$$



(OR)

**By number bond:**

$$\begin{array}{c}
 41 + 60 \\
 \swarrow \quad \searrow \\
 \boxed{1} \quad \boxed{\phantom{00}} \\
 = \text{___} + 1 = \text{___} \text{ centimeters.}
 \end{array}$$