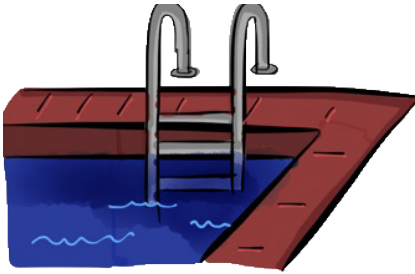# SOLVING MULTI-STEP SUBTRACTION PROBLEMS USING A NUMBER LINE
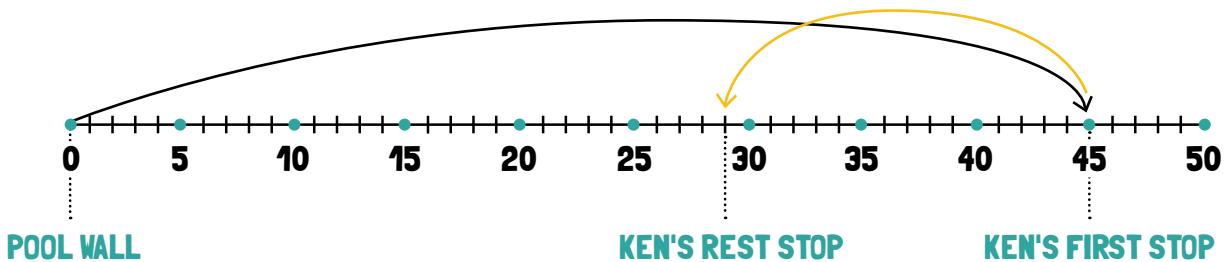
Read the problem below and follow the steps to solve the problem using the number line.
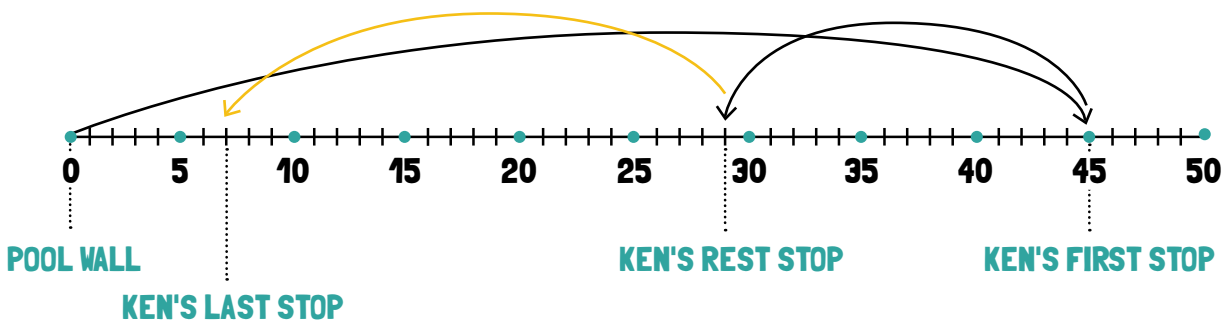
Ken was swimming in the pool. He started at the pool wall and swam 45 meters in one direction. Then, he turned around and swam back 16 meters toward the wall before stopping to take a rest. He started swimming again and swam 22 meters and then stopped. How many meters away is the wall when Ken stops this time?

0   5   10   15   20   25   30   35   40   45   50

POOL WALL   **KEN'S FIRST STOP**
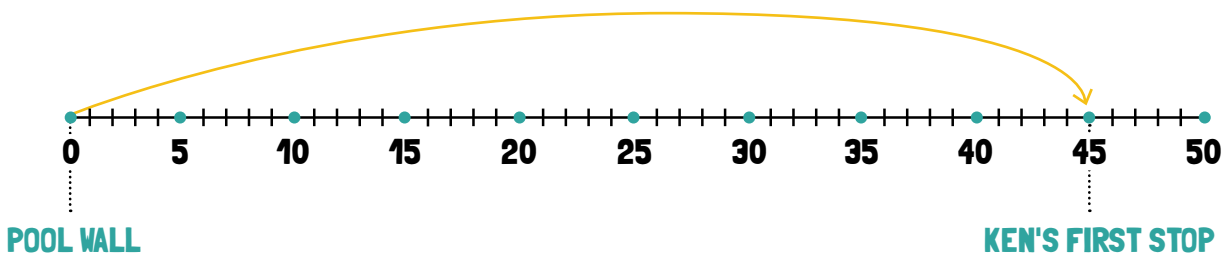
To solve the problem using the number line, you start at zero (the pool wall) and draw an arrow landing on the 45 to the show the 45 meters that Ken swam first.

0   5   10   15   20   25   30   35   40   45   50

POOL WALL   **KEN'S REST STOP**   **KEN'S FIRST STOP**

Next, count back 16 spaces on the number line and draw an arrow from the 45 to that spot. This is where Ken stopped to rest.

0   5   10   15   20   25   30   35   40   45   50

POOL WALL
**KEN'S LAST STOP**   **KEN'S REST STOP**   **KEN'S FIRST STOP**

Finally, count back 22 more spaces on the number line and draw an arrow to Ken's final destination. The number you finally land on is your answer.

So, **45m - 16m - 22m = 7m** and Ken is 7 meters away from the pool wall.

Now, you try. Read the problems and use the number lines to help you solve them. Then, write a number sentence to go with each problem.
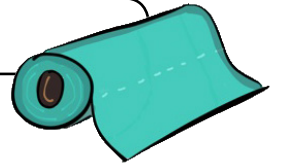
Judy, Jane and Josie needed paper towels for a project. Judy pulled off 48 inches of paper towel from the roll. She cut off 18 inches and gave it to Jane and then cut off 15 inches and gave it to Josie. How much of the paper towel was left for Judy?

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
0     5    10    15    20    25    30    35    40    45    50
```
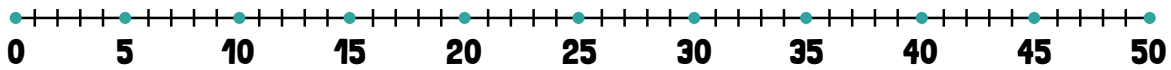
Number sentence _____

Judy had [ ] **inches of paper towel for her project.**

Tom rode his bike 32 miles from his house to his grandfather's house on Saturday. He spent the night and headed back toward home the next day. He rode for 14 miles and stopped to visit his cousin. Then he rode another 15 miles and stopped for lunch at a restaurant. When he leaves the restaurant, how many miles must he go to get home?

```
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
0     5    10    15    20    25    30    35    40    45    50
```
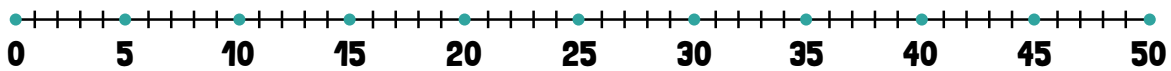
Number sentence _____

Tom is [ ] **miles away from home when he is at the restaurant.**