G3-M2-Lesson 15

1. Find the sums below. Choose mental math or the algorithm.

a. $69 \text{ cm} + 7 \text{ cm} = 76 \text{ cm}$

70 1 6

I can use mental math to solve this problem. I broke apart the 7 as 1 and 6. Then I solved the equation as $70 \text{ cm} + 6 \text{ cm} = 76 \text{ cm}$.

For this problem, the standard algorithm is a more strategic tool to use.

b. $59 \text{ kg} + 76 \text{ kg}$

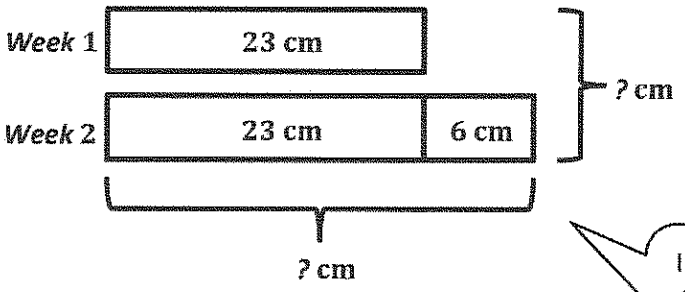
$$\begin{array}{r} 59 \text{ kg} \\ +\ 76 \text{ kg} \\ \hline 5 \end{array}$$

9 ones plus 6 ones is 15 ones. I can rename 15 ones as 1 ten and 5 ones. I can record this by writing the 1 so that it crosses the line under the tens in the tens place, and the 5 below the line in the ones column. This way I write 15, rather than 5 and 1 as separate numbers.

$$\begin{array}{r} 59 \text{ kg} \\ +\ 76 \text{ kg} \\ \hline 135 \text{ kg} \end{array}$$

5 tens plus 7 tens plus 1 ten equals 13 tens. So, $59 \text{ kg} + 76 \text{ kg} = 135 \text{ kg}$.

2. Mrs. Alvarez's plant grew 23 centimeters in one week. The next week it grew 6 centimeters more than the previous week. What is the total number of centimeters the plant grew in 2 weeks?



I can draw a double tape diagram for this problem because I am comparing Week 1 and Week 2.

I know that in Week 2 the plant grew 6 centimeters more than the previous week. So, I can add on 6 cm to 23 cm to get 29 cm in Week 2.

29 cm does not answer the question since this tells me how much the plant grew only in Week 2. I need to find the total number of centimeters the plant grew in 2 weeks.

$23 \text{ cm} + 6 \text{ cm} = 29 \text{ cm}$

In order to find the total number of centimeters the plant grew in 2 weeks, I can add 23 cm + 29 cm. I can use mental math to solve this problem since 29 is close to 30.

$23 \text{ cm} + 29 \text{ cm} = 52 \text{ cm}$

22 1 30

Now I can write a statement that answers the question. This helps me check my work to see if my answer is reasonable.

The plant grew 52 centimeters in 2 weeks.