G4-M7-Lesson 8

1 lb = 16 oz

1. Determine the following sum and difference. Show your work.

a. 6 lb 7 oz + 4 lb 9 oz = 11 lb

$6 \text{ lb } 7 \text{ oz} + 4 \text{ lb } 9 \text{ oz} = 10 \text{ lb } 16 \text{ oz} = 11 \text{ lb}$

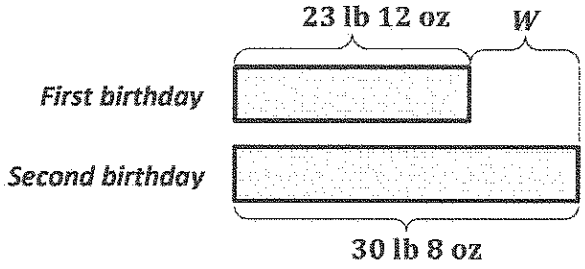
Just like adding units of capacity or length, I add like units and rename.

b. 10 lb 4 oz − 4 lb 9 oz = 5 lb 11 oz

$4 \text{ lb } 9 \text{ oz} \xrightarrow{+7 \text{ oz}} 5 \text{ lb} \xrightarrow{+5 \text{ lb}} 10 \text{ lb} \xrightarrow{+4 \text{ oz}} 10 \text{ lb } 4 \text{ oz}$

I choose to use the arrow way to solve. I count up to reach the next whole pound. I add to find how many I count up in all. That's the same as the difference.

2. On her first birthday, Gwen weighed 23 pounds 12 ounces. On her second birthday, Gwen weighed 30 pounds 8 ounces. How much weight did Gwen gain between her first and second birthday?



$W = 30 \text{ lb } 8 \text{ oz} - 23 \text{ lb } 12 \text{ oz}$

$29 \text{ lb} \quad 24 \text{ oz}$

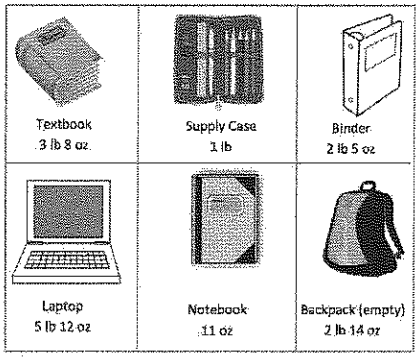
$= 6 \text{ lb } 12 \text{ oz}$

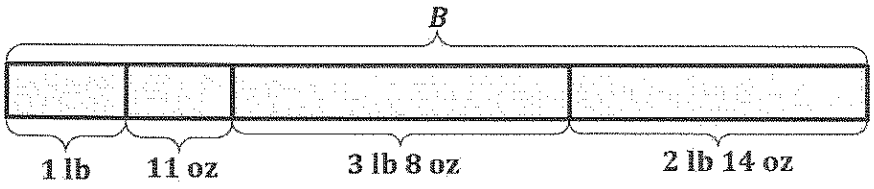
I think of 30 pounds 8 ounces as 29 pounds 16 ounces plus 8 ounces. I subtract like units to get my answer.

Gwen gained 6 pounds 12 ounces between her first and second birthday.

3. Use the information in the chart about Hayden's school supplies to answer the following question:

On Monday, Hayden packs her supply case, a notebook, and a textbook into her empty backpack. How much does Hayden's full backpack weigh on Monday?





$B = 1 \text{ lb} + 11 \text{ oz} + 3 \text{ lb } 8 \text{ oz} + 2 \text{ lb } 14 \text{ oz}$

$= 6 \text{ lb } 33 \text{ oz}$

$2 \text{ lb} \quad 1 \text{ oz}$

$= 8 \text{ lb } 1 \text{ oz}$

I draw a number bond to show 33 ounces as 2 pounds 1 ounce.

Hayden's full backpack weighed 8 pounds 1 ounce on Monday.