

Sub-Unit 3 | Summary

In this sub-unit . . .

- We learned that when dividing numbers, any amount left is called a **remainder**.


Maile is packing 294 lei into boxes. Each box can hold up to 4 lei.
How many boxes are needed to pack all the lei?

$$\begin{array}{r} 73 \\ 4 \overline{)294} \\ \underline{-28} \\ 14 \\ \underline{-12} \\ 2 \end{array}$$

remainder

(An arrow points from the word "remainder" to the circled number 2.)

Maile needs 74 boxes to fit all the lei.

 **Math tip:** The remainder should be less than the divisor.
Otherwise, you can make more equal groups.

- We used the context of problems to determine what to do with the remainder.

There are 293 players signed up for a basketball league. The league wants to place 7 players on each team and distribute any leftover players to make some 8-player teams. Determine the number of 7- and 8-player teams.

$$\begin{array}{r} 41 \\ 7 \overline{)293} \\ \underline{-28} \\ 13 \\ \underline{-7} \\ 6 \end{array}$$

293 divided by 7 is 41 with a remainder of 6.
35 teams will have 7 players. 6 teams will have 8 players

- We solved problems that required more than 1 step including two-step division and multiplication problems.

Pat's Lei Shop spent \$972 on cooling packets. Each cooling packet costs \$9.
Each box of lei needs 5 cooling packets. How many full boxes of lei can the shop prepare?

\$972 divided by \$9 is the first step to find how many packets Pat's Lei shop has.

$$\begin{array}{r} 108 \\ 9 \overline{) 972} \\ \underline{- 9} \\ 72 \\ \underline{- 72} \\ 0 \end{array}$$

Then, divide the 108 packets by 5 to find out how many boxes they can pack. They can pack 5 boxes of lei's and will have 3 cooling packets left over.

$$\begin{array}{r} 21 \\ 5 \overline{) 108} \\ \underline{- 10} \\ 8 \\ \underline{- 5} \\ 3 \end{array}$$

- When using division to solve two-step story problems, sometimes the final division calculation results in a remainder. To solve the story problem, it is important to use the context of the problem to interpret the remainder.