2.NBT Counting Stamps

Task

The post office packages stamps like this:

- 10 stamps in each strip.
- 10 strips of 10 in each sheet.

a. Yesterday Mike saw 4 full sheets, 7 strips, and 2 extra stamps in the drawer. He counted all the stamps and found out that there were 472 stamps in all. He said,

The number 472 matches the 4 sheets, 7 strips, and 2 stamps. Cool!

Why did Mike's number match up with the numbers of sheets, strips, and extra stamps? Draw a picture to help explain your answer.

b. Today Mike found 3 extra stamps, 1 sheet, and 5 strips. He said,

Because of how things matched up yesterday, I guess there are 315 stamps total.

   i. Find the total number of stamps.

   ii. Explain why Mike's guess is incorrect. What could he have done to guess correctly?

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