

New Feature – Math Puzzler.

We are adding a new feature to our newsletter.

Each month we will have a math puzzler for students to work on.

We want to encourage parents to get involved as well.

All of the puzzlers we will use have been solved by ordinary 3rd and 4th graders.

While vacationing in Arizona, the Squares family saw solar panels assembled as shown in **Figure 1**. Seymour Squares was impressed by the structure and quickly asked his sister, Ceda, “Hey, sis, how many squares do you see in the solar panel?”

Ceda Squares answered, “That’s easy; twenty-five because five times five is twenty-five.”

“Gotcha,” laughed Seymour. “There are twenty-five little squares, but they all come together to make one big square. So there are actually twenty-six squares.”

“Oh, well, if we are playing that way,” said Ceda cunningly, “then there are a lot more than twenty-six squares.”

“How so?” asked Seymour.

“Well,” said Ceda, “for instance, four little squares can be put together to make a larger square (see **Fig. 2**) and I think there are many other squares of many different sizes in that panel.”

“Then how many total squares are there?” demanded Seymour.

Help Seymour and Ceda answer this question. Look carefully at the sketch of the solar panel (see **fig. 1**) and determine the total number of squares in that structure. Then explain how you got your answer and how you know you have not left out any squares.

If the small squares are each 1-by-1 squares, what other sizes of squares and how many squares of each size are in the panel?

Figure 1

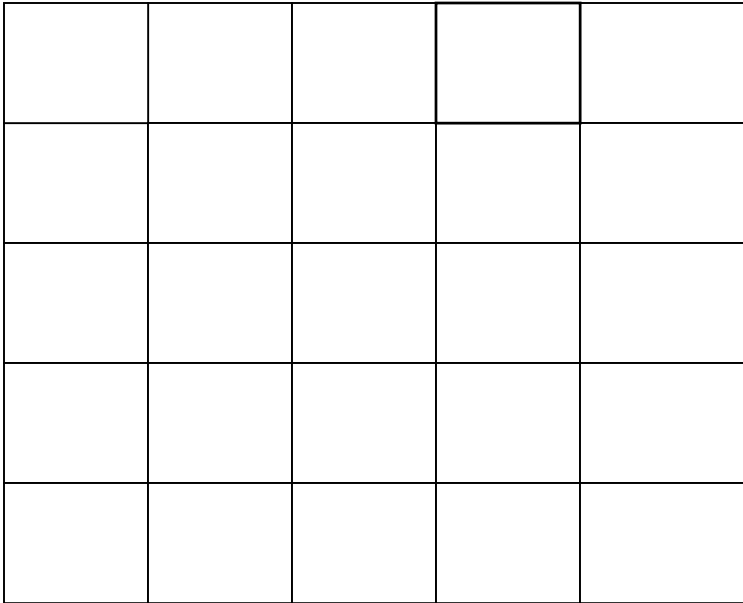
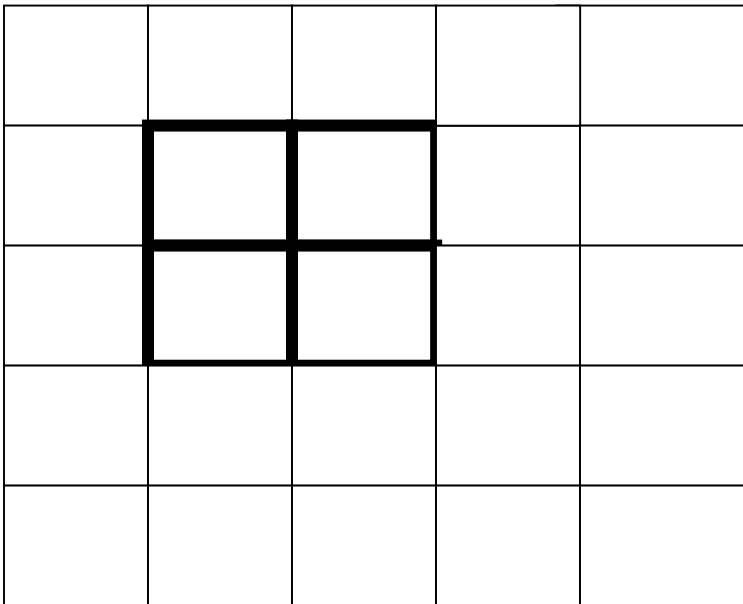


Figure 2



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