PROBLEM SOLVING TECHNIQUE 5: SOLVE A SMALLER VERSION OF THE SAME PROBLEM

PROBLEM 5:

A set of 25 square blocks is arranged into a 5 \mathbf{x} 5 square. How many different combinations of 3 blocks can be selected from that set so that no two are in the same row or column?

STEP 1: Read the question, have an emotional reaction to it, take a deep breath, and then reread the question.

STEP 2: Understand the question. Understand the different components of the question. What is the question about? Just state the obvious....

Now, to solve the problem--

Can you draw a picture of the problem? If so, draw it below.

Can you solve a smaller version of the same problem? If so, do it below.

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Is there another way to solve a smaller version of the problem? If so, do it below.

Can you use what you learned from the smaller versions of the problem to solve the original problem? Try it below.

Does the answer seem reasonable? If not, why not?

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If the answer isn't reasonable, use this space to try to figure out what was wrong and what the right answer should be.