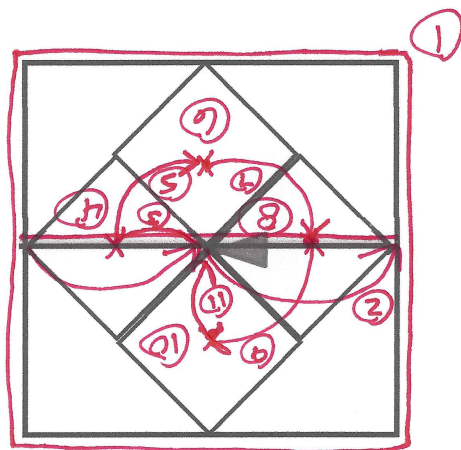


Exam 1 Review Solutions

2. Develop a strategy and write code using `drawSquareFromCenter(x)` to construct the following diamond figure assuming the cursor begins as shown. The user will enter `size1` which represents the size of the smaller squares. There should be no computations in drawing commands, use intermediate variables for calculated values.

Hint: Consider how the cursor must move in between each piece of the figure.

Draw a visual representation of the strategy you are proposing:



List the major tasks that are required to draw the diagram:

Tasks: (in no particular order)
 Draw large square
 Draw 4 diamonds around the origin
 Draw horizontal line
 Return cursor to origin

Now show the process you will follow in order to solve the problem. Each one of these will become a "TODO:" comment:

- ① Draw large square centered around origin
- ② Draw horizontal line
- ③ Position cursor to center of 1st diamond
- ④ Draw 1st diamond
- ⑤ Position cursor to center of 2nd diamond
- ⑥ Draw 2nd diamond
- ⑦ Position cursor to center of 3rd diamond
- ⑧ Draw 3rd diamond
- ⑨ Position cursor to center of 4th diamond
- ⑩ Draw 4th diamond
- ⑪ Return cursor to origin

NOTE: The above strategy does not contain any implementation details, e.g., it does not mention how to move the cursor between diamonds...