***MFM 2P – Painted Square Whiteboard Questions***

1. A painted square has side length
15 x 15. Draw an overhead diagram
like this one, but show how many
cubes fill each region of the square.
Label the regions (“4 faces painted”,
“3 faces painted”, “2 faces painted”)



1. Imagine a painted square had a total of 56 cubes with 3 faces painted. Draw an overhead diagram showing the square. What are the dimensions (length, width) of the square? Show your calculations.
2. Imagine a painted square had a total of 88 cubes with 3 faces painted. How many cubes in that same square have only 2 faces painted? Show your work.
3. If a painted square has a total of 121 cubes with 2 faces painted. Draw an overhead diagram showing the square and its regions. How big was the square? Show your calculations.
4. If a painted square has a total of 324 cubes with 2 faces painted, how many cubes in that same square have 3 faces painted? Show your work.