



R4 – TILE PILE WORKSHEET

Go to student.desmos.com, get the class password from your teacher, and do the Desmos activity called Tile Pile.

For this part we will focus on slides 1-3 of the activity (Mr. Martinez just hired you to tile his bathroom floor).

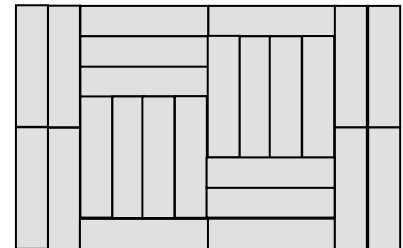
1. As you did this activity, you were told that you used _____ tiles to cover a _____ square foot section of the floor. What is the length of each side of this square?
2. Find the dimensions and the area of one of the purple rectangular tiles.
3. Compare your tiling with as many partners as is practical in class.

Did anyone tile exactly the same as you?

How many classmates that you compared with tile differently?

4. Why does it always take 16 of any type of piece to tile the original 4 square foot floor?

Chase tiled the floor to the right using only the purple tiles from this activity.



5. How many tiles did he use?
6. Write the dimensions for his floor on the diagram.
7. What is the perimeter of his floor?
8. What is the area of his floor?

9. Two entries from the table on slide 4 are provided here. Use this table to determine the area of Chase’s tiled floor. Clearly explain your reasoning, and whether or not this calculation agrees with your calculation in problems 5 and 8.

Area (sq ft)	Number of Tiles
4	16
12	48

10. Use this data to find the area of a floor that is tiled with 256 tiles.