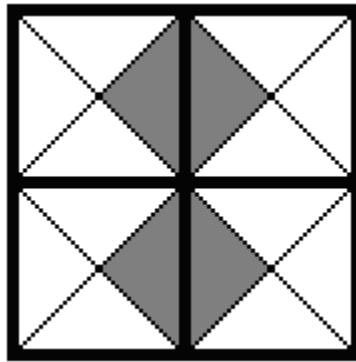




*Puzzle provided by Noetic Learning Math Contest*

Jessica has four square tiles. Each of them has an area of 4 square inches. She placed them together and drew a pattern as shown below. What is the area of the shaded part?





**Solution: 4 square inches.**

If we only look at one of the square tiles:



The shaded area is equal to  $\frac{1}{4}$  of the total area, which is 4 square inches. So the shaded area is 1 square inch. Together the pattern of tiles contains 4 shaded areas. The total shaded area is then  $1 \times 4 = 4$  square inches.