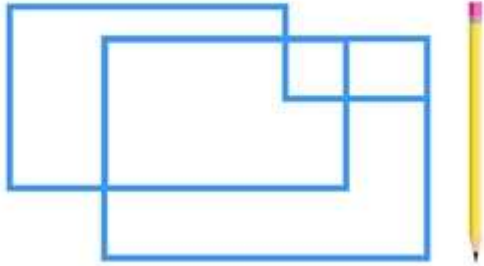
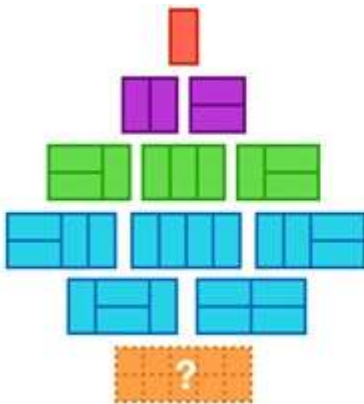


 **Mild** 

Is it possible to trace the figure without lifting your pencil or redrawing a line?



 **Mild** 



How many ways are there to tile a 5x2 area with 2x1 dominos?

- 7 8 9
- 10 11

Mild



Alex is taller than Brian but shorter than Charlie; Daniel is taller than Edward but shorter than Alex.

Who Is The Tallest Giant?

Mild

The letter “e” is used _____ times in this sentence.

nine

ten

eleven

twelve

🌶️🌶️ Medium 🌶️🌶️

The numbers 1, 2, 3, 4, and 5 appear in each row, column, and main diagonal exactly once.

5			1	
		2	3	
				4

What Number Is In The Blue Square?

🌶️🌶️ Medium 🌶️🌶️

At Step 101, how many cats will there be in the 9th row?

Step 1



Step 2



Step 3

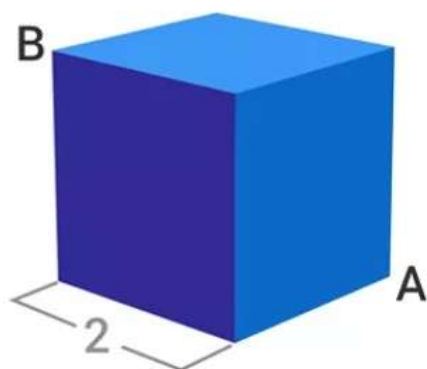


Step 4



🌶️🌶️ Medium 🌶️🌶️

The cube has edges of length 2.



What is the shortest path for the ant from A to B?



🌶️🌶️ Medium 🌶️🌶️

All cuts must be straight lines from one point on the edge of the pizza to another point on the edge of the pizza.

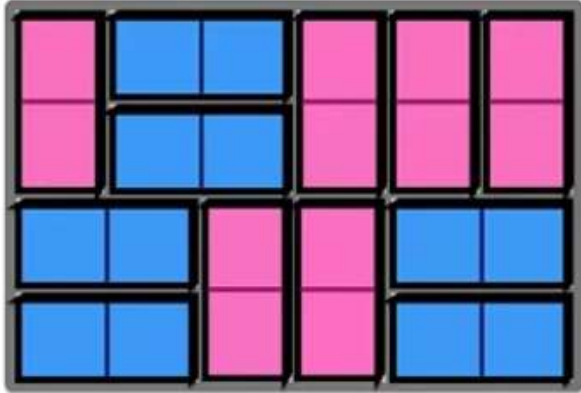
What is the maximum number of pieces you can cut a circular pizza into with 4 straight cuts?



- 8 10 11
 12 16

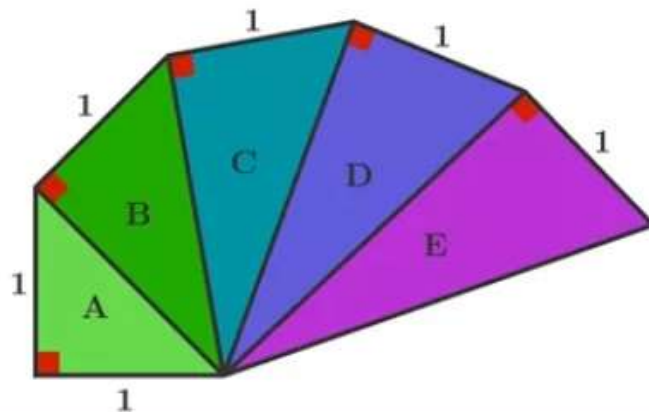
🌶️🌶️🌶️ Spicy 🌶️🌶️🌶️

How many ways are there to tile a 4 x 6 grid with twelve identical 1 x 2 dominoes?

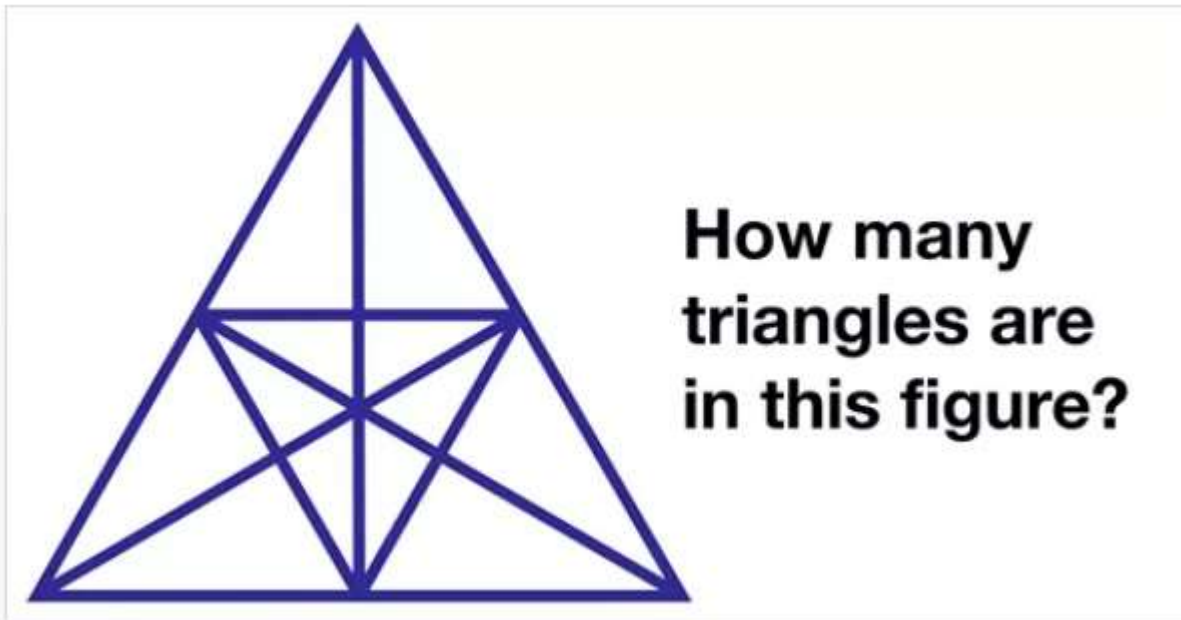


🌶️🌶️🌶️ Spicy 🌶️🌶️🌶️

Which triangle has area 1?



🌶️🌶️🌶️ Spicy 🌶️🌶️🌶️



🌶️🌶️🌶️ Spicy 🌶️🌶️🌶️

Factorials

$$\frac{6! \times 7!}{10!} = ?$$

Note: The exclamation points are all factorials:

$$6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1.$$

$\frac{1}{2}$

2

1

$\frac{1}{3}$