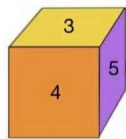
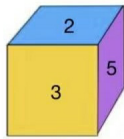


Perspective 1



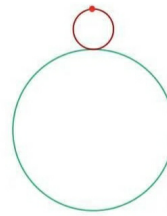
Perspective 2



Perspective 3

In the above image, a cube is painted so that each side is a different number. If each of the colors 1, 2, 3, 4, 5, and 6 are to be used, then what side is opposite the side colored 2?

- ☐ Green (6)
- ☐ Unknown
- ☐ Orange (4)
- ☐ Red (1)



The radius of the smaller circle is  $\frac{1}{4}$  the radius of the larger circle. The smaller circle rolls around the larger circle for one trip, back to its starting point, without any slipping.

How many times would the red dot on the smaller circle rotate around the center of the smaller circle?

- ☐ 5.0
- ☐ 4.5
- ☐ 4.0
- ☐ 5.5
- ☐ 3.5

You're playing tic tac toe with an opponent who is  $X$  while you are  $O$ .

The initial gameplay is as shown below:

X			X			X			?	X	?
							X		?	?	X
			O			O			O	?	?

Assuming that your opponent will play optimally from now on, where must you place your next mark in order to obtain a winning position?

- ☐ Upper-right corner
- ☐ Either upper-left corner or lower-right corner
- ☐ Either left side or lower side
- ☐ Middle tile



Suppose you are in a dungeon with two doors. One of the doors has a treasure and the other has a terrible monster.

The doors have signs on them. You know the sign on a door either tells the truth or lies.

FIRST DOOR: "Both doors are lying."

SECOND DOOR: "The treasure is in this room."

Where is the treasure?

- ☐ The first door
- ☐ The second door
- ☐ It is impossible to determine

