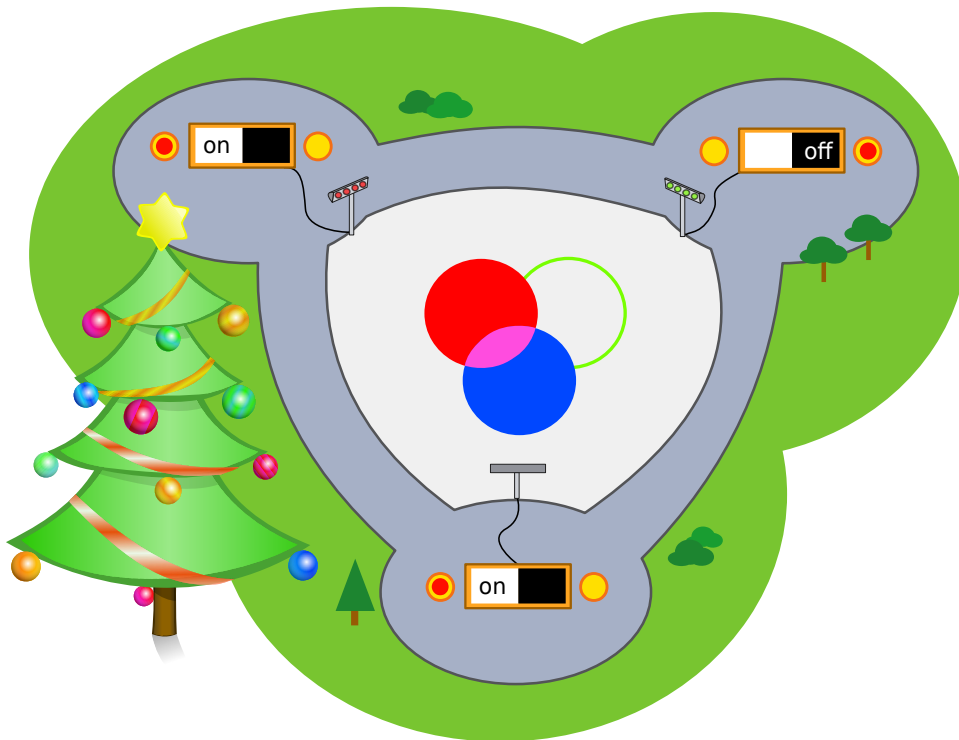




# Christmas lights



Fionnuala built a colourful Christmas lights display in the centre of town using red, green, and blue lights. Each colour has its own switch. The lights can be made to flash in eight different pretty patterns by turning the three switches on and off. The picture below shows the pattern when red and blue lights are switched on and the green light is switched off.



Fionnuala wants to test each pattern. To do so, she needs to try all eight different on/off combinations of the three switches. Unfortunately, the switches are each one kilometre apart and Fionnuala has to walk to a switch to be able to change it.

## QUESTION

**If Fionnuala can start at any one of the switches, what is the least number of kilometres she has to walk?**

- A. 5 km
- B. 6 km
- C. 7 km
- D. 8 km