

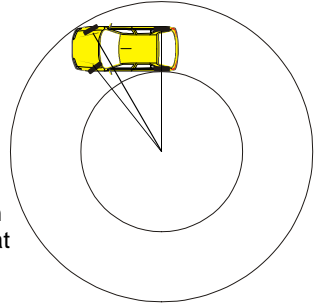
## Question

Why is it easier to get into a narrow parking place by driving backwards rather than forwards?

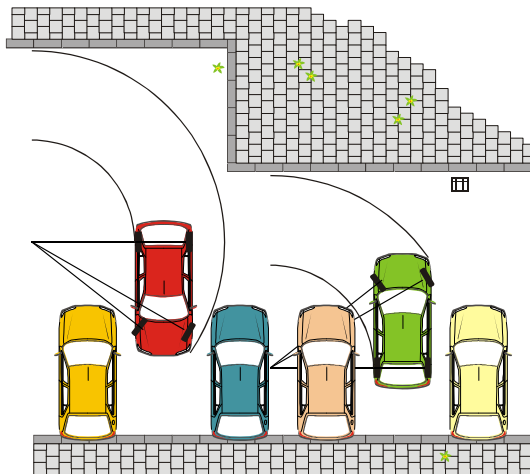
## Answer

Because cars are front wheel steered.

**Steering** To steer a car its front wheels are swivelled in such a way that all four wheels run on circles which have a common center. Look at the right picture.



**Geometry** The circular path given in that drawing shows the maximum steering angle. Regard now the bottom image. Let us drive our car into the middle of a narrow parking place. The red car on the left is parking forwards and the green one on the right is parking backwards. Observing the given segments of the circular path it can easily be seen that less space is needed when parking backwards.



If we take a parking place oriented parallel to the lanes similar considerations are possible.

**Advantage** In respect of the front position of the driver there is a better view when driving forwards. When *driving backwards*, however, one can reenter the traffic looking ahead. Relating to traffic safety this is more concise, more secure and at the end more healthy.

**Disadvantage** If a vehicle stands backwards at a wall, it causes soot stains on the wall when started; luckily modern motors hardly any more eject black smoke clouds when activated.