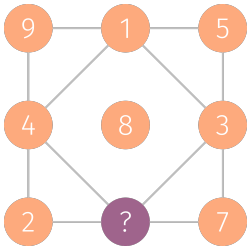
Exercises 01

Exercise 1

Can you find the missing number (there are two ways to find it) ?

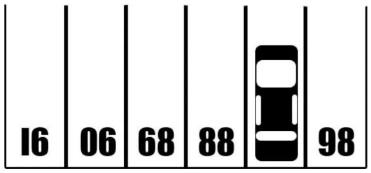


Exercise 2

As defined by the International Astronomical Union (IAU), the light-year is the product of the Julian year (365.25 days) and the speed of light (299,792,458 m/s).

1. How many kilometers is a light-year ?
2. Give an order of magnitude of this distance.

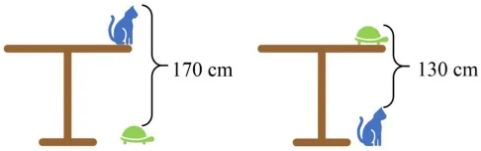
Exercise 3



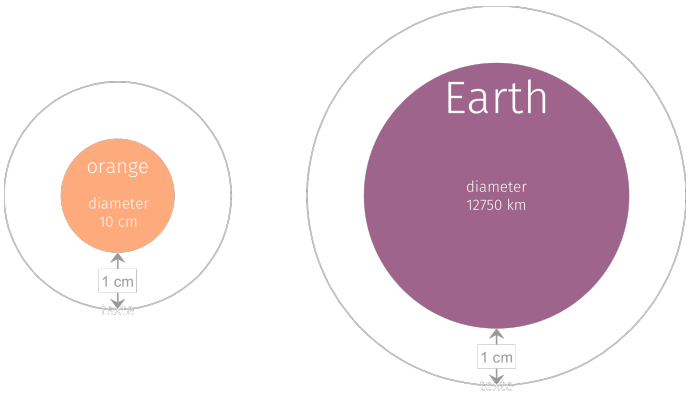
Can you find the number of the parking spot covered by the car ?

Exercise 4

How tall is the table ?



Exercise 5



1. Consider a rope just long enough to make a full circle around the circumference of an orange (which can be considered as a sphere with a diameter of 10 cm). How much do we have to add to the rope's length so that it "floats" 1 cm above the surface of the orange ?
2. Same question, replacing the orange with the Earth (which is much bigger, with a diameter of 12,750 km).