# Grade 5

**Problem №1.**

To replace a light bulb in her kitchen, Emily (who is 1.43 meters tall and can reach 47 centimeters above the top of her head) needs to stand on a stool. If the ceiling is 2.65 meters high and the light bulb is located 12 centimeters below the ceiling, how high must the stool be to allow Emily to successfully change the light bulb?

**Problem №2.**

In 2022, Mark turned 16 years old, his brother turned 19 years old, and their mother turned 43 years old. Thus, in 2022, the sum of their ages was 16+19+43=78.
In which year will the sum of their ages will be 50% more than it was in 2022?

**Problem №3.**

There are 200 women living in a small tribe on a remote island. It is known that 3% of them are wearing one earring each, always in their right ear. Of the remaining 97%, half are wearing two earrings each, both in the left ear, while the other half wears no earring at all.
How many earrings all together are being worn by the 200 women?

**Problem №4.**

Anna put some coins on the table – half 'heads up' and half 'tails up'. Anna then chose five of the coins and turned them over, after which two-thirds of the coins were 'heads up'. How many coins were on the table?

**Problem №5.**

The Least Common Multiple (LCM) of a pair of numbers is 144. If their sum is 66, and their difference is 30, what is the smaller number of that two?

**Problem №6.**

As an older man, Marcos can run 7 km in 2 hours and 20 minutes. However, when he was a younger man, he could run 28 km in 4 hours and 40 minutes. How many minutes longer does it take for him to run a km now compared to when he was a younger man?

**Problem №7.**

Daniel lives 210 kilometers from his parents' house. If he leaves home at 3:10 in the afternoon and drives at an average speed of 72 km/h, what time will he arrive at his parents? (Write your answer in 24-hour format, i.e. 11:00 pm would be written as 23:00.)

**Problem №8.**

Amna's daily route to school involves 30 minutes of walking uphill from her home to school and then 10 minutes of walk downhill from her school back home.

If the distance she walks each way (i.e. the distance between her home and her school) is exactly 1 kilometer, what is Amna's average speed, expressed in kilometers per hour, for her daily round trip?