Oral Presentation

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I chose the fifth exercise in which we have two problems, but I am just going to explain the first one.
(The first one) It is is about an orange considered as a sphere with a diameter of 10 cm and a rope just long enough to make a full circle around *(the orange)* it . We want to know how much we have to add to the rope's length to make it "float(s)" 1cm *(around)* above the orange.

First, to solve this problem, we have to know the circumference of the "old" rope or the orange.
For that, we know that the calculation for a circumference is 2 times π multiplied by the radius. We know the diameter of the orange, which is equal to 10 so its radius is equal to 5. Then, we calculate the circumference of the orange by doing 2 times π multiplied by five which gives us 10π.

Secondly, we have to find the circumference of the rope when it's 1 cm around the orange.
(If the rope is 1 cm around the orange) If the distance between the rope and the orange is 1 cm, that means that we have to add 1 cm to the radius of the rope. So, the radius of the rope around the orange is now equal to 6 cm. Then we have to calculate the circumference of the rope by doing 2 times π multiplied by 6 which gives us 12π.

But the question wasn't what is the circumference of the new rope but how much we have to add to the old rope to make it float 1 cm above the orange. To finally know that, we just have to subtract the circumference of the new rope to the circumference of the old rope[1]. So we do 12π minus 10π and it gives us 2π.

(To conclude) In conclusion, the answer of the problem is that we have to add 2 times π to the length of the rope to make it float 1 cm above the orange.

[1] Actually, it's the opposite.