



Problem of the Week

Problem A and Solution

Spoke Too Soon

Problem

Ian rides his bike around a circular track that is 400 m long. He rides 4 full laps. His sister, Lisa, rides 3 more laps than Ian, but her circular track has a length of 250 m.

Who rides farther, and by how many metres?



Solution

Ian rides 4 laps of the 400 m track for a total of:

$$400 + 400 + 400 + 400 = 1600 \text{ m}$$

Lisa rides $4 + 3 = 7$ laps of a 250 m track for a total of:

$$250 + 250 + 250 + 250 + 250 + 250 + 250 = 1750 \text{ m}$$

Lisa rides further by a total of $1750 - 1600 = 150 \text{ m}$.