

Problem of the Week

Problem A

Backpack Limit

Selma is going on a trip with her family. The airline allows each person's carry-on luggage to have a maximum mass of 10 kg. The clothes she wants to bring have a mass of 1.5 kg. She has three books that she wants to read. Two books are the same size, and each has a mass of 2 kg. The third book is 1500 g. She wants to bring her laptop and tablet as well. The laptop's mass is 2.3 kg. Her tablet's mass is 800 g. The shoes she needs for the trip are 1200 g. Her personal toiletries kit is 0.6 kg.

Can Selma bring everything she wants for the trip in her carry-on? Justify your answer.

