

Milk Lovers

Emanuel, Veda, Isaac, and Adrian love to drink milk. They convince their father, who does all the shopping, to buy each of them their own gallon of milk. They all write their names on their gallons. One day, they were all really thirsty and each took ten drinks according to a different system:

Emanuel started by drinking half of the milk in his container. Then he drank one-third of what was left. Then he drank one-fourth of what was left, then one-fifth, and so on.

Veda started by drinking one-eleventh of her milk, then one-tenth of what was left, then one-ninth of what was left, and so on.

Isaac started by drinking one-half of his milk, then two-thirds of what was left, then three-fourths of what was left, then four-fifths, and so on.

Adrian started by drinking one-half of his milk, then one-half of what was left, then one-half of what was left, and so on.

1. After each person had taken ten drinks, how much milk remained in each of their container?
2. If each person continues to drink his/her milk following his/her established system, who will finish first? Who will finish last?

