Question:

Brittany and her mom go to the museum. The cost of admission is $12 for adults and $10 for children. Brittany's mom gives the cashier money for 1 child ticket and 1 adult ticket. If she received $8 in change, how much money, in dollars, did she give the cashier?

Reasoning + Answer:

<think> Brittany's mom paid with money for 1 child ticket (price of child ticket) + money for 1 adult ticket (price of adult ticket), which in total is equal to money that she gave the cashier - $ 8 (change). That can be written as : price of child ticket + price of adult ticket = money that Brittany's mom gave - $ 8 Solving the linear equation and recalling that the price of a child ticket is $ 10 and the price of an adult ticket is $ 12 results in the following equation : 10 + 12 = money that Brittany's mom gave - 8 So , money that Brittany's mom gave = (10 + 12) + 8 = (10 + 12) + 8 = 120 + 8 = $ 128 <answer> 128 </answer>