

S-CP.7 Coffee at Mom's Diner

Task

At Mom's diner, everyone drinks coffee. Let C= the event that a randomly-selected customer puts cream in their coffee. Let S= the event that a randomly-selected customer puts sugar in their coffee. Suppose that after years of collecting data, Mom has estimated the following probabilities:

$$P(C) = 0.6$$

 $P(S) = 0.5$
 $P(C \text{ or } S) = 0.7$

Estimate P(C and S) and interpret this value in the context of the problem.



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