Bank model

A bank is planning the requirements for its ATMs, in the frame of a new expansion. There are places for up to six ATMs, not all these places have to be used. You can buy three types of ATM: ATM generals (to give cash, balances, mini statements and change PIN), cash machines for the payment of money and ATMs that provide the full statements of the account. The Bank has a policy that customers would not have to wait more than 5 minutes in *most* cases (usually performed with the 99% of cases).

For the problem of the Bank, we select the following variables as factors, determining the next factorial design. We are interested in analyzing the service time of the ATM.

	GENERAL ATM. (A)	**INCOME ATM. (B)**	**MANAGEMENT ATM. (C)**	**ANSWER**
E1	-	-	-	8.7
E2	-	-	+	8.7
E3	-	+	-	8.7
E4	-	+	+	8.7
E5	+	-	-	1.4
E6	+	-	+	1.4
E7	+	+	-	1.4
E8	+	+	+	1.4

Where "+" means 2 servers while "-" one.

Calculate the effects of (A), (B) and (C) using direct formulas and using Yates algorithm.