Notes about theta

Q1 : P(X=1) = f1(theta’) = f1(theta - mu)

Q2 : P(X=2) = f2(theta’’) = ifelse(Q1 == 1, f2(theta - mu?), f2(theta - 2\*mu))

Q2 : P(X=2) = f2(theta’’) = ifelse(Q1 == 1, f2(theta - mu), f2(theta - mu- mu’))

1. Mu -> Q1
2. Mu -> Q2
3. In addition Q1 -> Q2

The first part (A+B) is just a testlet model. In which, some questions load on an additional factor (misconception) besides theta. But C adds direct dependence.

typically:

P(Q1 = 1 | theta) \indep P(Q2 = 1 | theta)

In testlet:

P(Q1 = 1 | theta, mu) \indep P(Q2 = 1 | theta, mu)

We want neither.