Beta	0.4
Gamma	0.04
+/- dBeta	0.04
+/- dGamma	0.004
J	240.99
+/- dJ, from dBeta	0.7361
+/- dJ, from dGamma	0.07361

I don't exactly understand how I'm supposed to use which numbers for the last parts of Part B.

 ${\tt J}$  is calculated using the quadrature model provided with  ${\tt I}\_k$  from Part A.

Both dJ's are calulated using the same quadrature model, just for the integral from of dJ with  $[dI/dBeta]_k$  also from Part A.