

Microsoft Excel Program Shell Worksheet with inserted columns “F” and “J” (Prior 1 as example):

A	B	C	D	E	F	G	H	I	J	K	L	M	N
1					1				1				
2	Excel Program				2				2				
3			TC		3		Control		3		Difference		
4	Knowledge	Mean	StDev	n	4	Mean	StDev	n	4	Mean	StError	Weight	Prob.
5	Prior	-11.09	12.00	22	5	-1.33	10.60	21	5	=C5-G5	=SQRT(((D5^2*(E5-1)+H5^2*(I5-1))/(E5+I5-2))*(1/E5+1/I5))	=(1/L5^2)/((1/L5^2+1/L6^2))	=1-NORMDIST(0,K5,L5,TRUE)
6	Likelihood(data)	-5.00	10.06	12	6	4.64	9.37	10	6	=C6-G6	=SQRT(((D6^2*(E6-1)+H6^2*(I6-1))/(E6+I6-2))*(1/E6+1/I6))	=1/L6^2/(1/L6^2+1/L5^2)	
7	Posterior				7				7	=K5*M5+K6*M6	=SQRT(1/((1/L5^2+1/L6^2)))		=1-NORMDIST(0,K7,L7,TRUE)

**Calculations for Prior 1**

\*Calculations consistent with the article by Carpenter, Gajewski, Teel, and Aaronson (2008), pp. 214-219.

A	B	C	D	E	F	G	H	I	J	K	L	M	M
1					1				1				
2	Excel Program				2				2				
3			TC		3		Control		3		Difference		
4	Knowledge	Mean	StDev	n	4	Mean	StDev	n	4	Mean	StError	Weight	Prob.
5	Prior	-11.09	12	22	5	-1.33	10.6	21	5	-9.76*	3.46*	0.593*	0.0024*
6	Likelihood(data)	-5	10.06	12	6	4.64	9.37	10	6	-9.64*	4.18*	0.407*	
7	Posterior				7				7	-9.71*	2.66*		0.0001*