

Assignment 9: Due Nov 19, 2017

* Please name your homework file as ‘Assignment9_Your name.pdf’ in pdf format and send it at biostat_situ@163.com , thanks for your cooperation.

1. A new fertilizer has been developed to increase the yield on crops, and the makers of the fertilizer want to better understand which of the three formulations (blends) of this fertilizer are most effective for wheat, corn, soy beans and rice (crops). They test each of the three blends on five samples of each of the four types of crops. Run an F-test to test the effect of fertilizer and crops.

Fertilizer	Crop			
	Wheat	Corn	Soy	Rice
Blend X	123	128	166	151
	156	150	178	125
	112	174	187	117
	100	116	153	155
	168	109	195	158
Blend Y	135	175	140	167
	130	132	145	183
	176	120	159	142
	120	187	131	167
	155	184	126	168
Blend Z	156	186	185	175
	180	138	206	173
	147	178	188	154
	146	176	165	191
	193	190	188	169

2. Run an F-test to test the effect of teaching method on the students’ scores.

Subject	Teaching Method		
	1	2	3
GT	40	32	30
	36	29	35
	38	36	33
Regular	24	20	18
	21	29	26
	20	25	26
Special Ed.	22	20	18
	18	18	14
	16	19	19