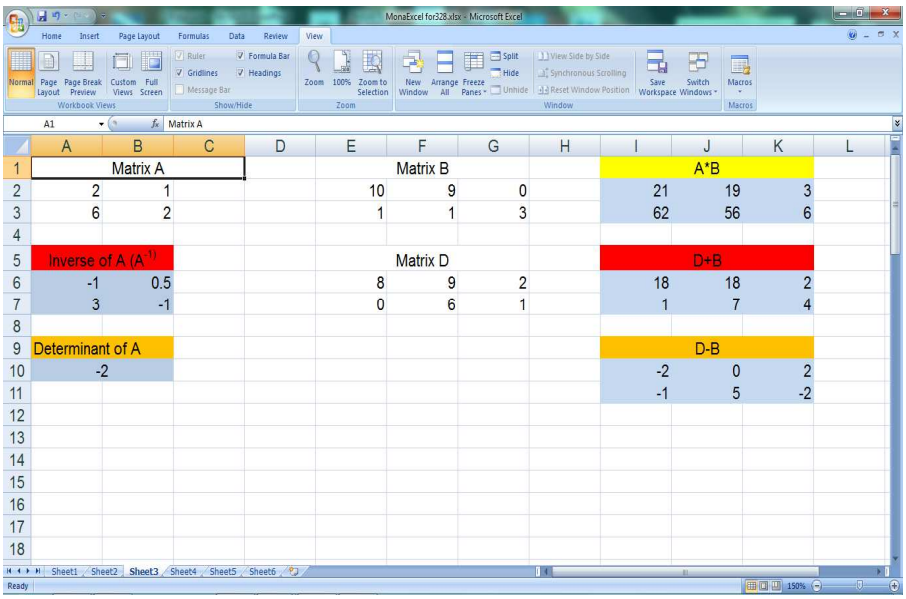
Dr. Mona Elwakeel **328 stat**



	A	B	C	D	E	F	G	H	I	J	K	L
1	Matrix A				Matrix B				A*B			
2	2	1			10	9	0		21	19	3	
3	6	2			1	1	3		62	56	6	
4												
5	Inverse of A (A^{-1})				Matrix D				D+B			
6	-1	0.5			8	9	2		18	18	2	
7	3	-1			0	6	1		1	7	4	
8												
9	Determinant of A								D-B			
10	-2								-2	0	2	
11									-1	5	-2	
12												
13												
14												
15												
16												
17												
18												

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328 stat

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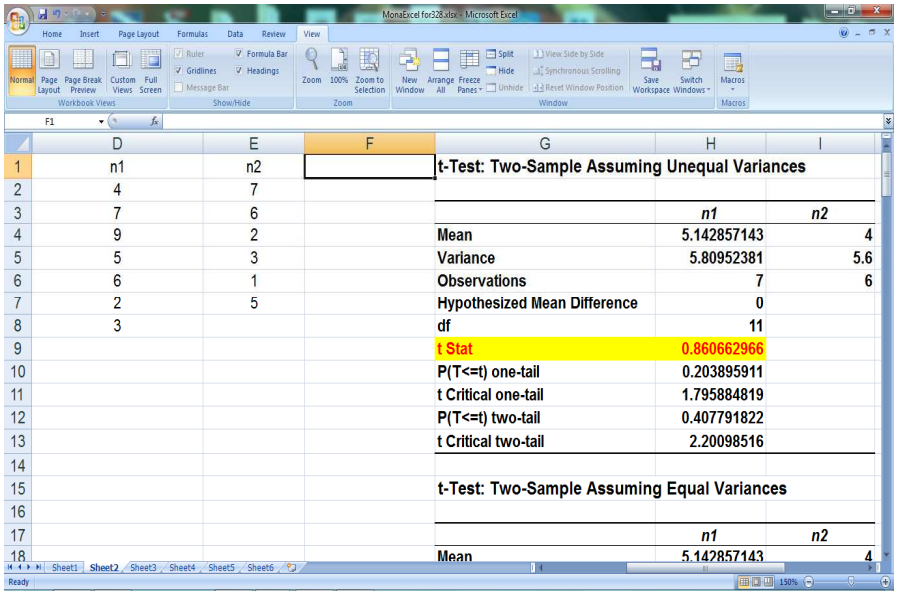

	D	E	F	G	H	I
1	n1	n2		t-Test: Two-Sample Assuming Unequal Variances		
2	4	7				
3	7	6			*n1*	*n2*
4	9	2		Mean	5.142857143	4
5	5	3		Variance	5.80952381	5.6
6	6	1		Observations	7	6
7	2	5		Hypothesized Mean Difference	0	
8	3			df	11	
9				t Stat	0.860662966	
10				P(T<=t) one-tail	0.203895911	
11				t Critical one-tail	1.795884819	
12				P(T<=t) two-tail	0.407791822	
13				t Critical two-tail	2.20098516	
14						
15				t-Test: Two-Sample Assuming Equal Variances		
16						
17					*n1*	*n2*
18				Mean	5.142857143	4

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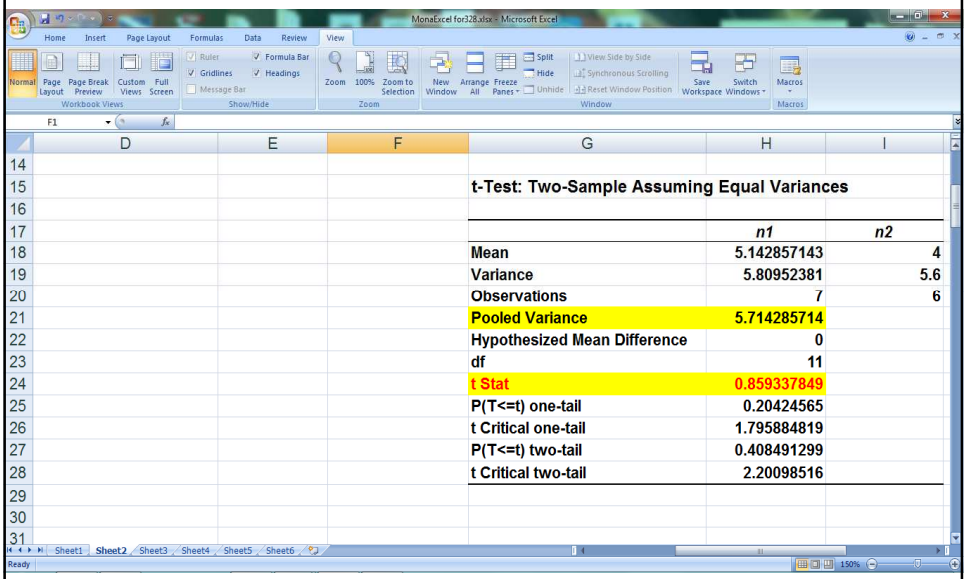
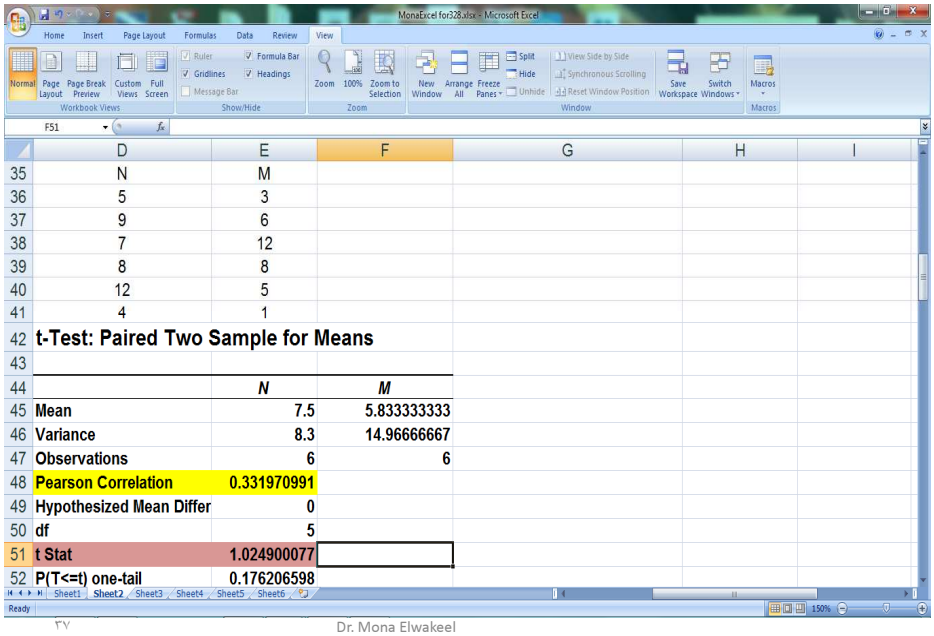
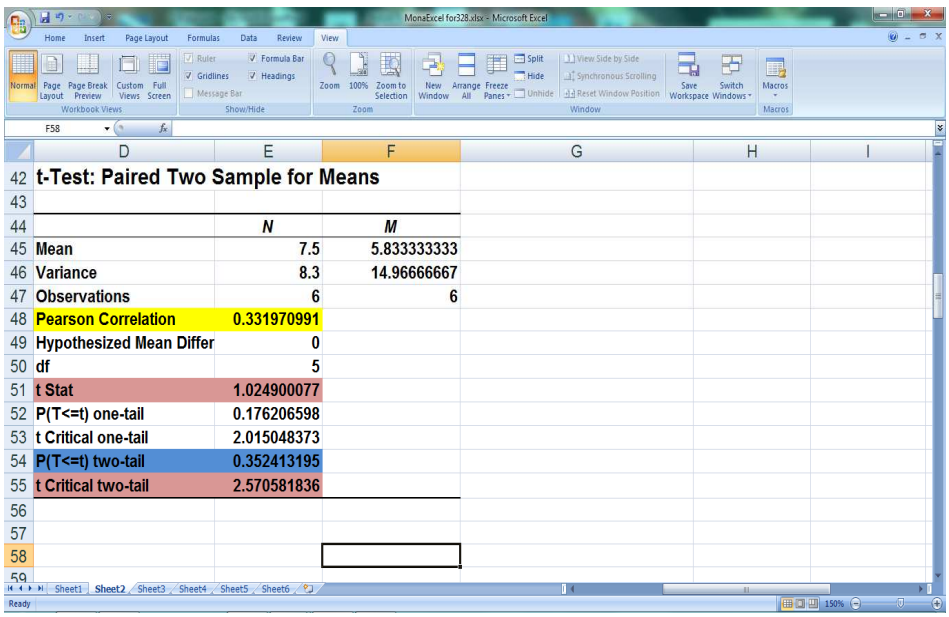


		n1	n2
t-Test: Two-Sample Assuming Equal Variances			
	Mean	5.142857143	4
	Variance	5.80952381	5.6
	Observations	7	6
	Pooled Variance	5.714285714	
	Hypothesized Mean Difference	0	
	df	11	
	t Stat	0.859337849	
	P(T<=t) one-tail	0.20424565	
	t Critical one-tail	1.795884819	
	P(T<=t) two-tail	0.408491299	
	t Critical two-tail	2.20098516	

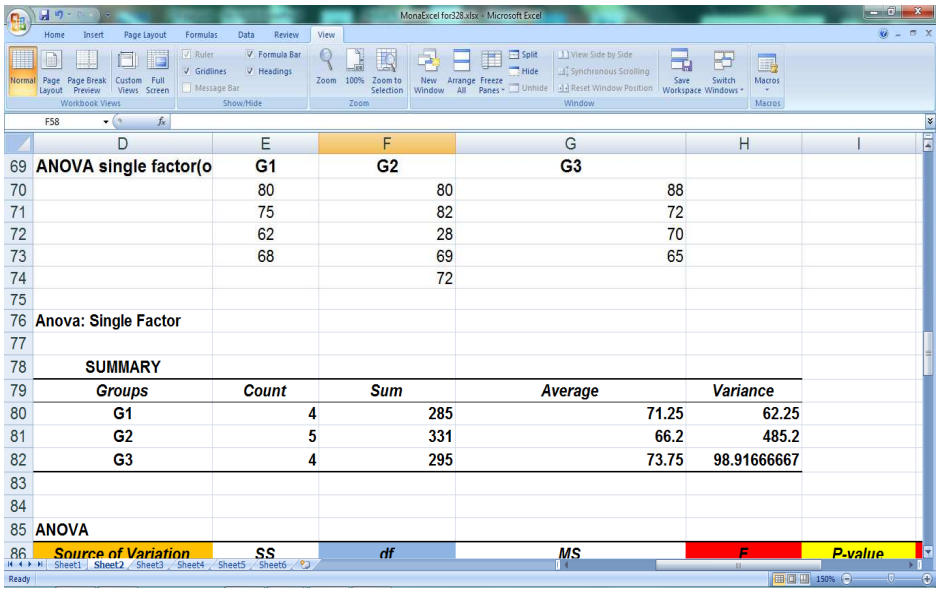


N	M
5	3
9	6
7	12
8	8
12	5
4	1

t-Test: Paired Two Sample for Means		N	M
	Mean	7.5	5.833333333
	Variance	8.3	14.96666667
	Observations	6	6
	Pearson Correlation	0.331970991	
	Hypothesized Mean Differ	0	
	df	5	
	t Stat	1.024900077	
	P(T<=t) one-tail	0.176206598	



	D	E	F
42	t-Test: Paired Two Sample for Means		
43			
44		N	M
45	Mean	7.5	5.833333333
46	Variance	8.3	14.96666667
47	Observations	6	6
48	Pearson Correlation	0.331970991	
49	Hypothesized Mean Differ	0	
50	df	5	
51	t Stat	1.024900077	
52	P(T<=t) one-tail	0.176206598	
53	t Critical one-tail	2.015048373	
54	P(T<=t) two-tail	0.352413195	
55	t Critical two-tail	2.570581836	



	D	E	F	G	H	I
69	ANOVA single factor(o	G1	G2	G3		
70		80	80	88		
71		75	82	72		
72		62	28	70		
73		68	69	65		
74			72			
75						
76	Anova: Single Factor					
77						
78	SUMMARY					
79	Groups	Count	Sum	Average	Variance	
80	G1	4	285	71.25	62.25	
81	G2	5	331	66.2	485.2	
82	G3	4	295	73.75	98.91666667	
83						
84						
85	ANOVA					
86	Source of Variation	SS	df	MS	F	P-value

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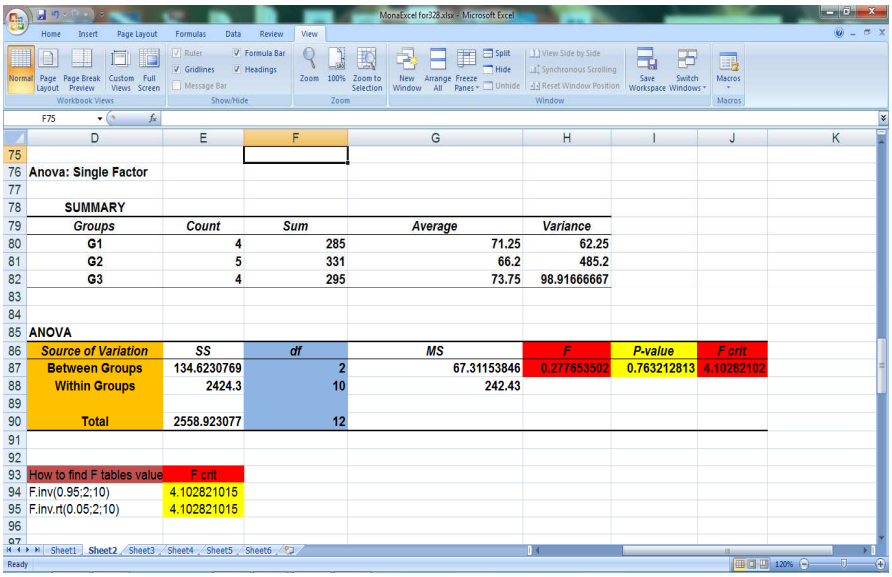

	D	E	F	G	H	I	J	K
75								
76	Anova: Single Factor							
77								
78	SUMMARY							
79	*Groups*	*Count*	*Sum*	*Average*	*Variance*			
80	G1	4	285	71.25	62.25			
81	G2	5	331	66.2	485.2			
82	G3	4	295	73.75	98.91666667			
83								
84								
85	ANOVA							
86	*Source of Variation*	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	
87	Between Groups	134.6230769	2	67.31153846	0.277653502	0.763212813	4.10282102	
88	Within Groups	2424.3	10	242.43				
89								
90	Total	2558.923077	12					
91								
92								
93	How to find F tables value	F crit						
94	F.inv(0.95;2;10)	4.102821015						
95	F.inv.rt(0.05;2;10)	4.102821015						
96								

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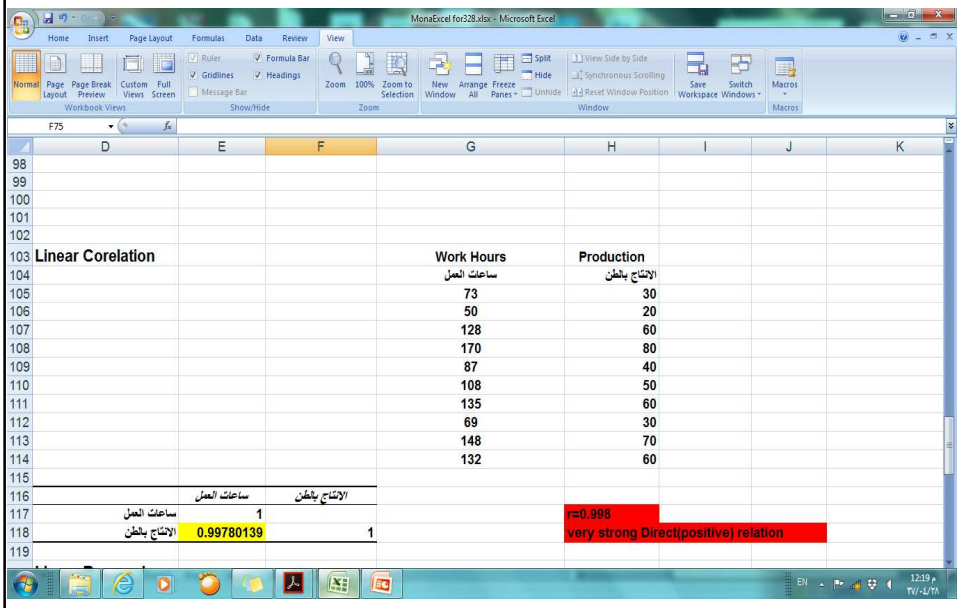
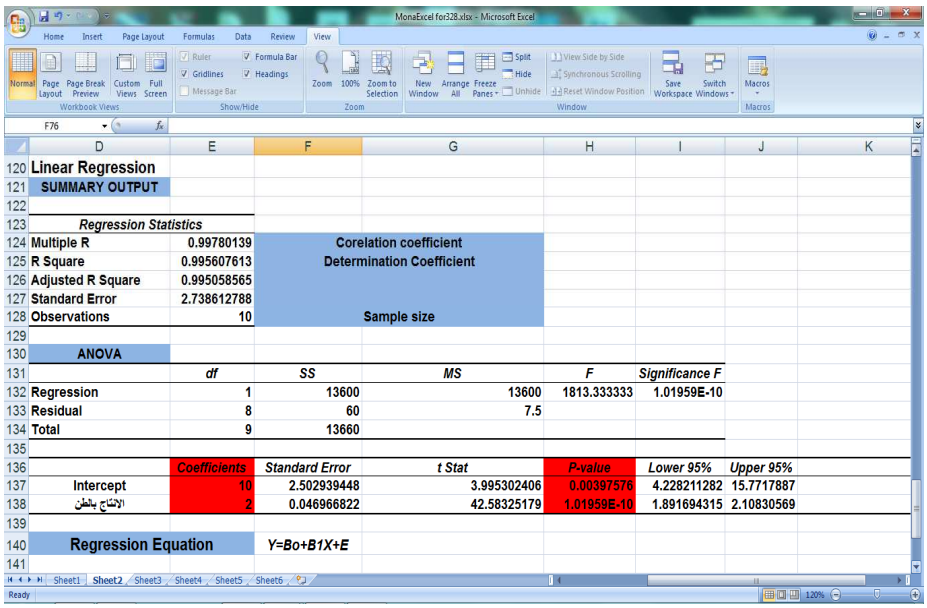
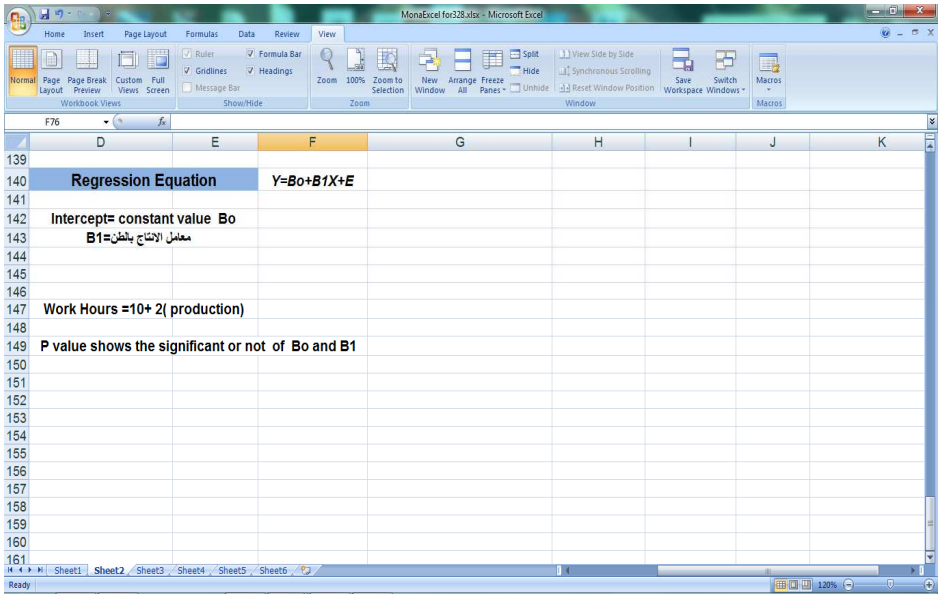


	D	E	F	G	H	I	J	K
98								
99								
100								
101								
102								
103	Linear Corelation			Work Hours	Production			
104				ساعات العمل	الانتاج بالطن			
105				73	30			
106				50	20			
107				128	60			
108				170	80			
109				87	40			
110				108	50			
111				135	60			
112				69	30			
113				148	70			
114				132	60			
115								
116		ساعات العمل	الانتاج بالطن					
117	ساعات العمل	1			r=0.998			
118	الانتاج بالطن	0.99780139	1		very strong Direct(positive) relation			
119								



	D	E	F	G	H	I	J	K
120	Linear Regression							
121	SUMMARY OUTPUT							
122								
123		Regression Statistics						
124	Multiple R	0.99780139	Corelation coefficient					
125	R Square	0.995607613	Determination Coefficient					
126	Adjusted R Square	0.995058565						
127	Standard Error	2.738612788						
128	Observations	10	Sample size					
129								
130	ANOVA							
131		df	SS	MS	F	Significance F		
132	Regression	1	13600	13600	1813.333333	1.01959E-10		
133	Residual	8	60	7.5				
134	Total	9	13660					
135								
136		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	
137	Intercept	10	2.502939448	3.995302406	0.00397576	4.228211282	15.7717887	
138	الانتاج بالطن	2	0.046966822	42.58325179	1.01959E-10	1.891694315	2.10830569	
139								
140	Regression Equation		Y=Bo+B1X+E					
141								



	D	E	F	G	H	I	J	K
139								
140	Regression Equation		Y=Bo+B1X+E					
141								
142	Intercept= constant value Bo							
143	B1=معامل الانتاج بالطن							
144								
145								
146								
147	Work Hours =10+ 2(production)							
148								
149	P value shows the significant or not of Bo and B1							
150								
151								
152								
153								
154								
155								
156								
157								
158								
159								
160								
161								