

**Yang, Kun 301178299****Assignment 3 Part 1 - Snappers  
family members information**

Obs	name	sex	FavTvShow	FavSport	Birthday	Height	SysBloodPres
1	Carl	M	StarTrek	Cycling	1956-02-21	1.85	120
2	Lois	F	DownTownAbby	Tennis	1956-02-02	1.60	.
3	Matthew	F	HereComesKangXi	Hiking	1986-02-03	1.90	110
4	Marianne	F	House	Tennis	.	1.60	.
5	David	M	DieHard	Hiking	1991-03-01	1.45m	130

**Yang, Kun 301178299****Assignment 3 Part 1 - Snappers*****information on summer earnings for students in different faculties***

Obs	faculty_name	sample_size	mean_earnings	standard_deviation
1	Engineering	50	5000	1200
2	Business	40	3500	1500
3	Education	10	2500	.
4	AppSci	30	3500	1600

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**Water quality data before fixups**

Obs	cturbidity	SampleDate
1	225	2013-06-01
2	<100	2013-06-02
3	245+	2013-06-03
4	100	2013-06-04
5	24+	2013-06-05
6	123456+	.

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***Assignment 3 Part 1 - Snappers***  
***Water quality data after fixups***

Obs	cturbidity	SampleDate	lc_turbidity	whereless	detectlimit	turbidity
1	225	2013-06-01	no	.		225
2	<100	2013-06-02	yes	1	100	100
3	245+	2013-06-03	yes	4		.
4	100	2013-06-04	no	.		100
5	24+	2013-06-05	yes	3		.
6	123456+	.	yes	7		.

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**check your recoding**

	lc_turbidity	
	no	yes
	N	N
turbidity		
.	.	3
100	1	1
225	1	.

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***Assignment 3 Part 1 - Snappers  
final grades from two years of a course***

Obs	sex	name	year	grade
1	m	Fred	2013	80
2	m	Jack	2013	85
3	m	David	2013	82
4	m	Matthew	2013	82
5	f	Jane	2013	95
6	f	Lois	2013	98
7	f	Marianne	2013	90
8	f	Ruth	2013	91
9	m	Gary	2014	80
10	m	Richard	2014	80
11	m	Tim	2014	85
12	f	Joan	2014	82
13	f	Kim	2014	82
14	f	Rachel	2014	95
15	f	Pauline	2014	98
16	f	Fiona	2014	90
17	f	Phillipa	2014	91

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**Assignment 3 Part 1 - Snappers  
mean & 95% Confidence Limits for final grades**

***The MEANS Procedure***

Analysis Variable : grade				
year	N Obs	Lower 50% CL for Mean	Upper 50% CL for Mean	Mean
2013	8	86.2	89.5	87.9
2014	9	85.4	88.6	87.0

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**Assignment 3 Part 1 - Snappers**  
***final grades from two years of a course***

Obs	sex	name	year	grade	female
1	m	Fred	2013	80	0
2	m	Jack	2013	85	0
3	m	David	2013	82	0
4	m	Matthew	2013	82	0
5	f	Jane	2013	95	1
6	f	Lois	2013	98	1
7	f	Marianne	2013	90	1
8	f	Ruth	2013	91	1
9	m	Gary	2014	80	0
10	m	Richard	2014	80	0
11	m	Tim	2014	85	0
12	f	Joan	2014	82	1
13	f	Kim	2014	82	1
14	f	Rachel	2014	95	1
15	f	Pauline	2014	98	1
16	f	Fiona	2014	90	1
17	f	Phillipa	2014	91	1



# Assignment 3 Part 1 - Snappers

## Paired t-test analysis

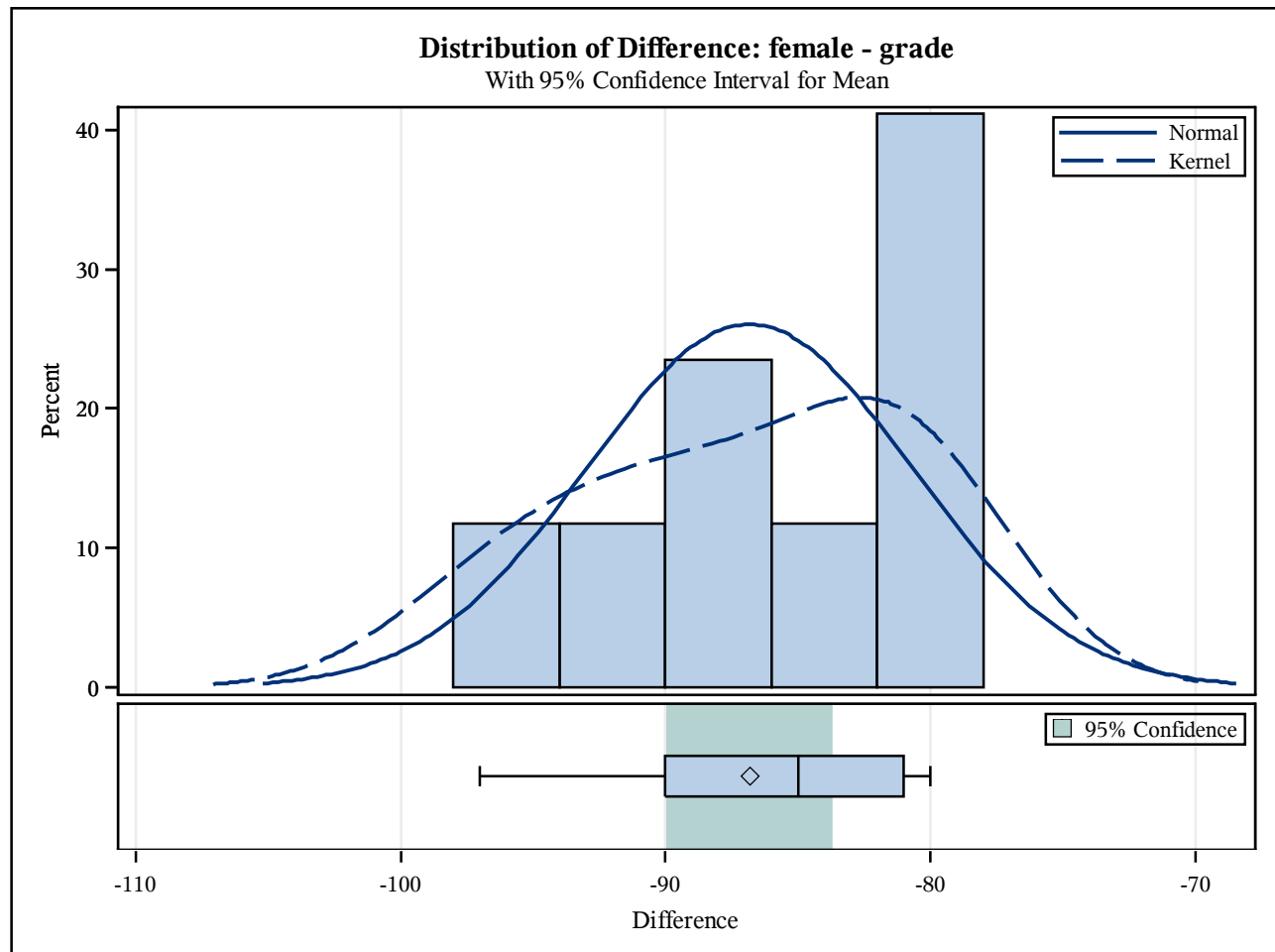
### The TTEST Procedure

**Difference: female - grade**

N	Mean	Std Dev	Std Err	Minimum	Maximum
17	-86.8235	6.1261	1.4858	-97.0000	-80.0000

Mean	95% CL Mean		Std Dev	95% CL Std Dev	
-86.8235	-89.9733	-83.6738	6.1261	4.5626	9.3235

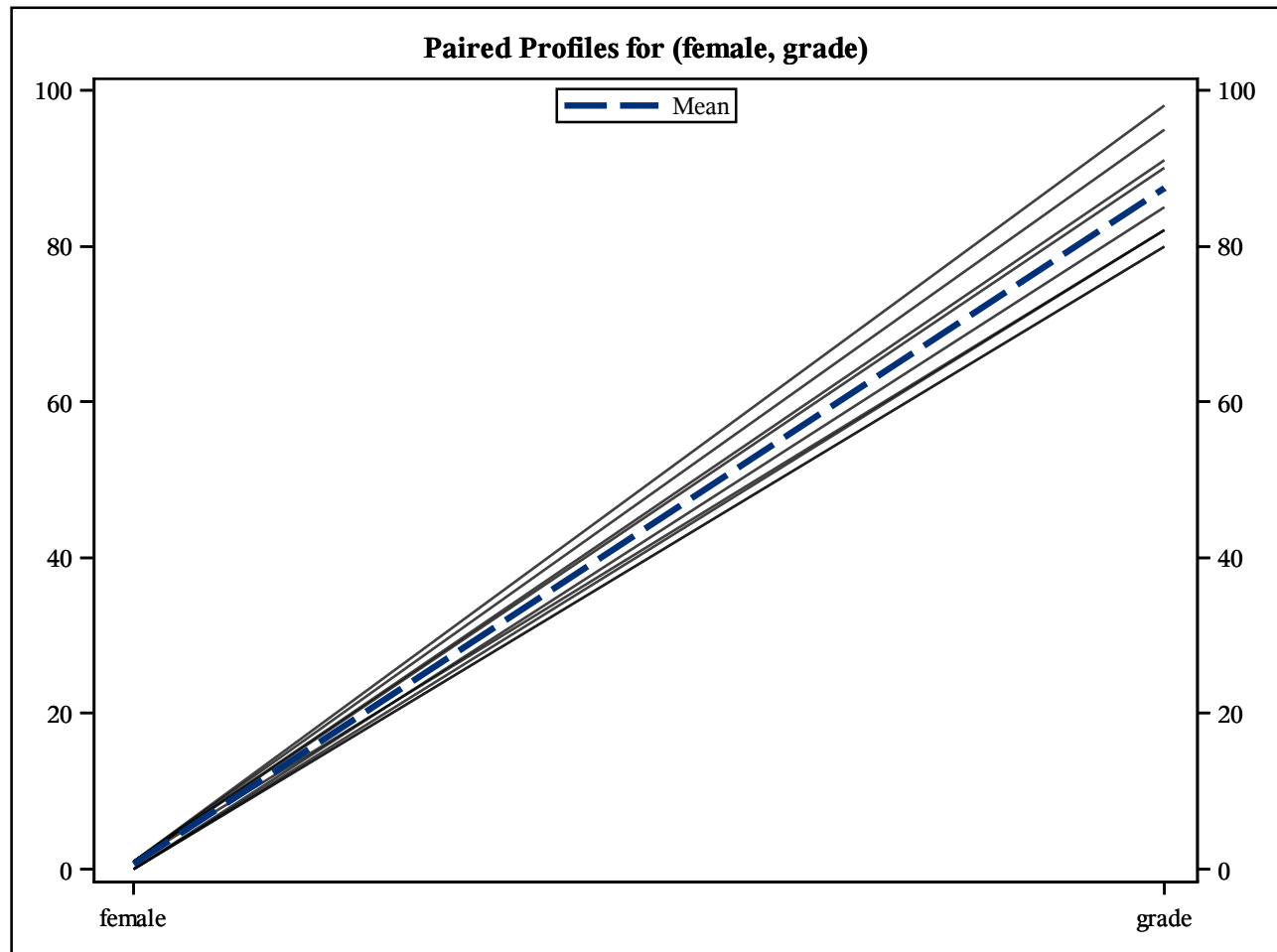
DF	t Value	Pr >  t
16	-58.44	<.0001



*Assignment 3 Part 1 - Snappers*  
*Paired t-test analysis*

*The TTEST Procedure*

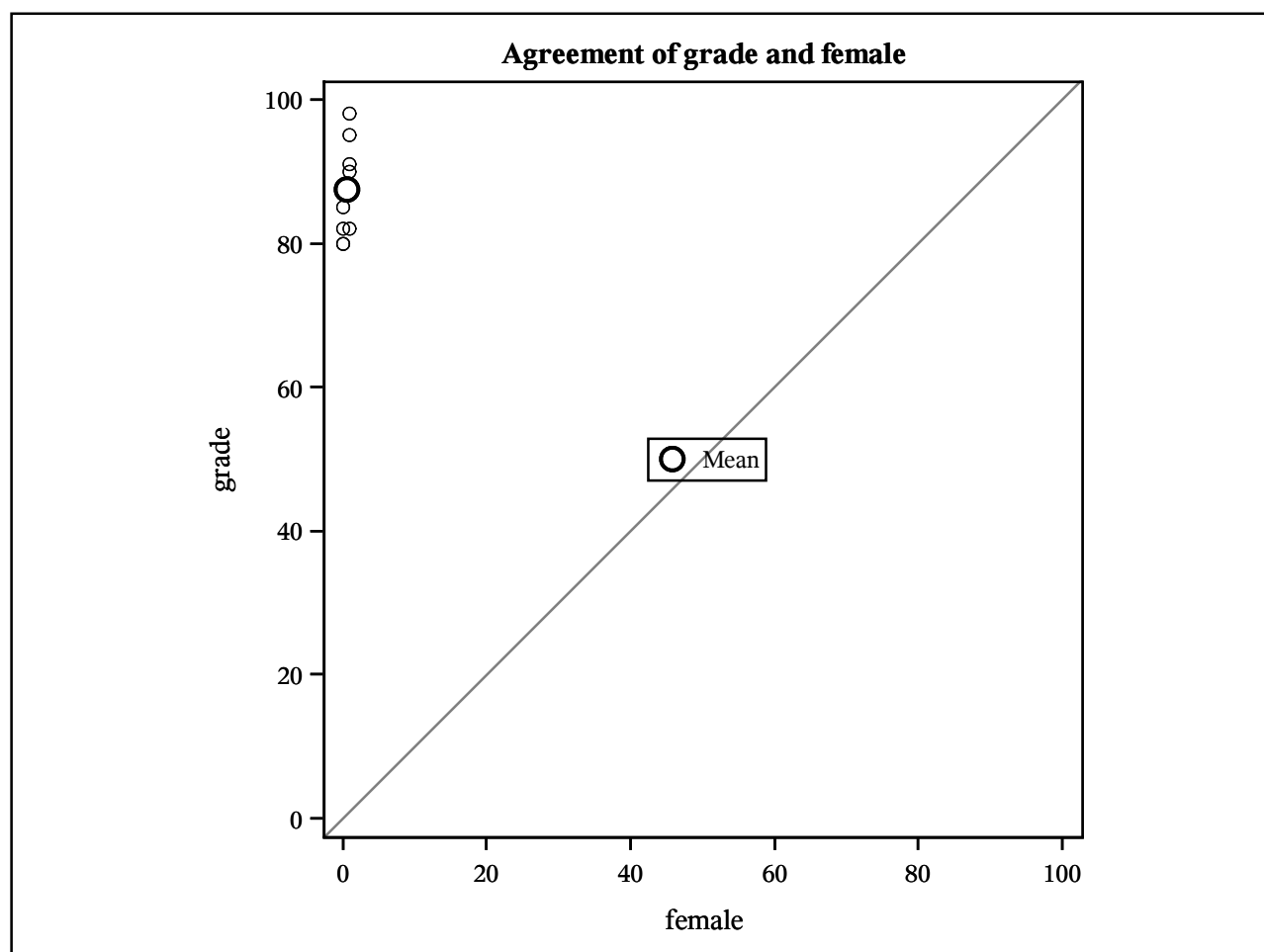
*Difference: female - grade*



**Assignment 3 Part 1 - Snappers**  
**Paired t-test analysis**

**The TTEST Procedure**

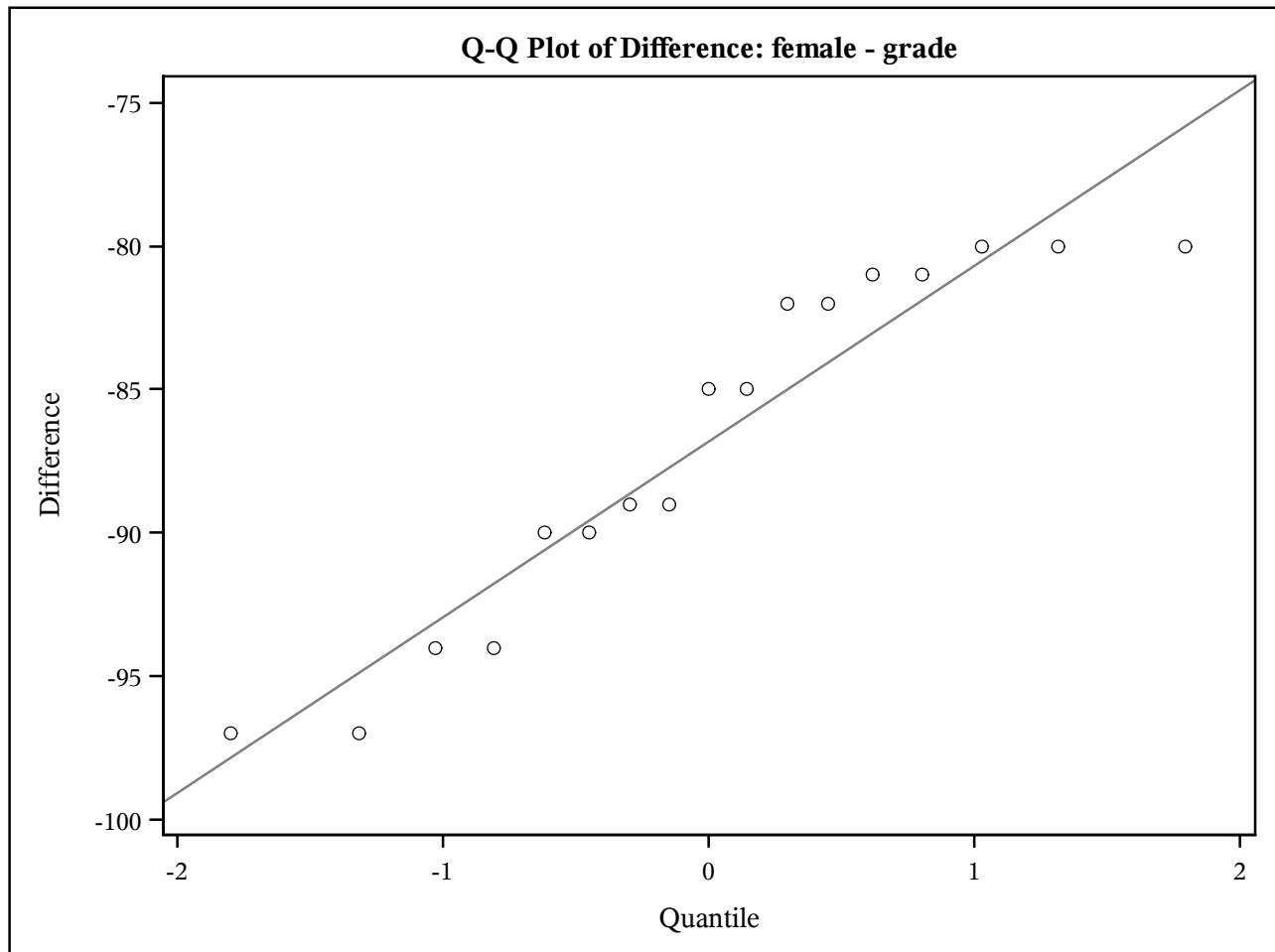
**Difference: female - grade**



**Assignment 3 Part 1 - Snappers**  
**Paired t-test analysis**

**The TTEST Procedure**

**Difference: female - grade**



*Assignment 3 Part 1 - Snappers*  
*Ttests*

Obs	Variable1	Variable2	Difference	tValue	DF	Probt
1	female	grade	female - grade	-58.44	16	<.0001