All Souls St Gabriels School

Year 10 Advanced Mathematics Semester 2 Assignment

TASK IDENTIFIER	STUDENT NAME	TEACHER NAME
2.1	Jacklenn Dart	Miss Marley
TOPICS	**GENRE**	**SITTING DATES:**
Data	Report	Issued: Draft Due: Final Due:

TASK CONDITIONS

TIME ALLOWED: 3 weeks (Two weeks in Class)

INSTRUCTIONS TO STUDENTS:

1. You must adhere to All Souls St Gabriel's Assessment Policy.
2. Any submitted work is to be typed
3. Show full working and/or reasoning/justification at all times.
4. Present your work neatly and use correct grammar, punctuation and spelling.
5. Use of a calculator is permitted.
6. Grades will be awarded according to the marking criteria grids
7. Your name must be on the front of this paper and on all separate pages of work submitted.

CCE's

Recalling/remembering, Graphing, Calculating with or without calculators, Substituting in formulae, Extrapolating, Sketching/drawing, Structuring/organising a mathematical argument, Setting out/presenting/arranging/displaying, Applying strategies to trial and test ideas and procedures, Applying a progression of steps to achieve the required answer

RESULTS

U&F		PS&R	

TEACHER COMMENTS

Excel Spreadsheets

Maths Assignment - Jacklenn Dart

Table 1 - Volume of World Exports of Raw Cotton, By Country						
	2005–06	**2006–07**	**2007–08**	**2008–09**	**2009–10**	**2010–11**
	kt	kt	kt	kt	kt	kt
Africa	1495	1249	1024	778	886	882
Mali	223	185	109	71	96	98
Americas	4416	3209	3528	3551	3097	3693
Australia	650	487	266	260	395	505
Greece	294	272	283	174	191	163
Uzbekistan	1045	980	915	653	827	577
Other	1641	1792	2371	1098	2263	1819

Table 1 - Results						
Mean	1394.857	1167.714286	1213.71429	940.7143	1107.85714	1105.285714
Median	1045	980	915	653	827	577
Mode	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Max	4416	3209	3528	3551	3097	3693
Min	223	185	109	71	96	98
Range	4193	3024	3419	3480	3001	3595
Quartile1	472	379.5	274.5	217	293	334
Quartile3	1568	1520.5	1697.5	938	1574.5	1350.5
IQR	1096	1141	1423	721	1281.5	1016.5

Table 2 - Australian Cotton Harvested, Lint Yeild and Production						
		Area Harvested			**Lint Yield**	
	NSW	**QLD**	**AUSTRALIA**	**NSW**	**QLD**	**AUSTRALIA**
	'000 ha	'000 ha	'000 ha	t/ha	t/ha	t/ha
1990–91	202	77	279	1.678	1.403	1.602
1991–92	225	87	312	1.812	1.688	1.777
1992–93	204	82	286	1.478	1.314	1.431
1993–94	210	84	294	1.301	1.123	1.25
1994–95	157	89	246	1.594	1.402	1.524
1995–96	185.5	118.4	303.9	1.46	1.27	1.386
1996–97	277	119.1	396.1	1.599	1.403	1.54
1997–98	299.3	138.8	438.2	1.588	1.371	1.519
1998–99	381.7	179.9	561.5	1.243	1.341	1.274
1999–2000	313	151.3	464.3	1.574	1.638	1.595
2000–01	327.9	199.4	527.3	1.627	1.432	1.553
2001–02	289.7	119.3	409	1.771	1.594	1.719
2002–03	165.2	59.3	224.5	1.83	1.43	1.724
2003–04	97.2	100.8	198.1	1.849	1.68	1.763
2004–05	162.8	158.1	320.9	2.136	1.881	2.011
2005–06	214.3	121.2	335.5	1.883	1.597	1.779
2006–07	108.7	34.9	143.6	2.223	1.71	2.099
2007–08	41.2	21.4	62.7	2.252	1.864	2.12
2008–09	88	76	164	2.024	1.987	2.007
2009–10	123.8	84.5	208.3	2.067	1.549	1.857
2010–11	347.7	242.5	590.2	1.689	1.396	1.569
2011–12	358.1	241.1	600	2.057	1.907	1.996

2012–13	283.5	158.5	442	2.335	2.146	2.267

Table 2 - Results						
Mean	220.113	119.2826087	339.43913	1.785652	1.57069565	1.711391304
Median	210	118.4	312	1.771	1.549	1.719
Mode	#N/A	#N/A	#N/A	#N/A	1.403	#N/A
Max	381.7	242.5	600	2.335	2.146	2.267
Min	41.2	21.4	62.7	1.243	1.123	1.25
Range	340.5	221.1	537.3	1.092	1.023	1.017
Quartile1	159.9	83	235.25	1.591	1.399	1.532
Quartile3	294.5	154.7	440.1	2.0405	1.699	1.9265
IQR	134.6	71.7	204.85	0.4495	0.3	0.3945

Table 4 - Area Harvested, Australia	
Year	Australia
	'000 ha
2000–01	527.3
2001–02	409
2002–03	224.5
2003–04	198.1
2004–05	320.9
2005–06	335.5
2006–07	143.6
2007–08	62.7
2008–09	164
2009–10	208.3
2010–11	590.2
2011–12	600
2012–13	442

Table 4 - Formulas	
Mean	325.0846
Median	320.9
Mode	#N/A
Max	600
Min	62.7
Range	537.3
Quartile1	198.1
Quartile3	442
IQR	243.9

table 4 - Area Harvested, Australia	
Year	**AUSTRALIA**
	'000 ha
1990–91	279
1991–92	312
1992–93	286
1993–94	294
1994–95	246
1995–96	303.9
1996–97	396.1
1997–98	438.2
1998–99	561.5
1999–2000	464.3
2000–01	527.3
2001–02	409
2002–03	224.5
2003–04	198.1
2004–05	320.9
2005–06	335.5
2006–07	143.6
2007–08	62.7
2008–09	164
2009–10	208.3
2010–11	590.2
2011–12	600
2012–13	442

2011–12	2012–13
kt	kt
983	1278
136	191
3782	3900
994	1306
218	261
544	697
3367	2533

1432	1452.28571
983	1278
#N/A	#N/A
3782	3900
136	191
3646	3709
381	479
2180.5	1919.5
1799.5	1440.5

Cottonseed Production		
NSW	QLD	AUSTRALIA
kt	kt	kt
526	160	686
563	186	749
365.1	162.4	527.5
334.2	131.3	465.5
286.5	187.1	473.6
382.4	212.4	594.8
627.5	232.6	860.1
672.3	269	941.3
677.5	346.9	1024.4
695.7	350.4	1046.2
740.5	399.5	1140
777.1	276.4	1053.5
425.3	120.5	545.8
254.2	239.6	493.7
491.8	420.5	912.3
570.6	273.8	844.4
311.1	76.7	387.8
131.3	56.5	187.8
252	213.6	465.5
361.9	185.1	547
805.2	464.2	1269.4
1041.5	650.2	1693.5

935.9	481	1416.9

531.6783	265.030435	796.7826087
526	232.6	749
#N/A	#N/A	465.5
1041.5	650.2	1693.5
131.3	56.5	187.8
910.2	593.7	1505.7
348.05	173.75	510.6
686.6	348.65	1035.3
338.55	174.9	524.7

Table 4 - Formulas	
Mean	342.1863636
Median	316.45
Mode	#N/A
Max	600
Min	62.7
Range	537.3
Quartile1	229.875
Quartile3	441.05
IQR	211.175

Table 3 - Australian Exports	
Year	Australia
2005-06	650
2006-07	487
2007-08	266
2008-09	260
2009-10	395
2010-11	505
2011-12	994
2012-13	1306
Table 3 - Formulas	
Mean	607.875
Median	496
mode	#N/A
Max	1306
Min	260
Range	1046
Quartile1	362.75
Quartile3	736
IQR	373.25

Year 10 Advanced Mathematic Assignment

Part A

Table 1 - Volume of World Exports of Raw Cotton, By Country								
	2005–06	**2006–07**	**2007–08**	**2008–09**	**2009–10**	**2010–11**	**2011–12**	**2012–13**
	kt	kt	kt	kt	kt	kt	kt	kt
Africa	1495	1249	1024	778	886	882	983	1278
Mali	223	185	109	71	96	98	136	191
Americas	4416	3209	3528	3551	3097	3693	3782	3900
Australia	650	487	266	260	395	505	994	1306
Greece	294	272	283	174	191	163	218	261
Uzbekista	1045	980	915	653	827	577	544	697
Other	1641	1792	2371	1098	2263	1819	3367	2533

Table 1 - Results								
Mean	1394.857	1167.71429	1213.71429	940.7143	1107.85714	1105.285714	1432	1452.28571
Median	1045	980	915	653	827	577	983	1278
Mode	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Max	4416	3209	3528	3551	3097	3693	3782	3900
Min	223	185	109	71	96	98	136	191
Range	4193	3024	3419	3480	3001	3595	3646	3709
Quartile1	472	379.5	274.5	217	293	334	381	479
Quartile3	1568	1520.5	1697.5	938	1574.5	1350.5	2180.5	1919.5
IQR	1096	1141	1423	721	1281.5	1016.5	1799.5	1440.5

Table 1 - Formulas								
Mean	=AVERAGE(C6:C12)	=AVERAGE(D6:D12)	=AVERAGE(E6:E12)	=AVERAGE(F6:F12)	=AVERAGE(G6:G12)	=AVERAGE(H6:H12)	=AVERAGE(I6:I12)	=AVERAGE(J6:J12)
Median	=MEDIAN(C6:C12)	=MEDIAN(D6:D12)	=MEDIAN(E6:E12)	=MEDIAN(F6:F12)	=MEDIAN(G6:G12)	=MEDIAN(H6:H12)	=MEDIAN(I6:I12)	=MEDIAN(J6:J12)
Mode	=MODE(C6:C12)	=MODE(D6:D12)	=MODE(E6:E12)	=MODE(F6:F12)	=MODE(G6:G12)	=MODE(H6:H12)	=MODE(I6:I12)	=MODE(J6:J12)
Max	=MAX(C6:C12)	=MAX(D6:D12)	=MAX(E6:E12)	=MAX(F6:F12)	=MAX(G6:G12)	=MAX(H6:H12)	=MAX(I6:I12)	=MAX(J6:J12)
Min	=MIN(C6:C12)	=MIN(D6:D12)	=MIN(E6:E12)	=MIN(F6:F12)	=MIN(G6:G12)	=MIN(H6:H12)	=MIN(I6:I12)	=MIN(J6:J12)
Range	=C18-C19	=D18-D19	=E18-E19	=F18-F19	=G18-G19	=H18-H19	=I18-I19	=J18-J19
Quartile1	=QUARTILE(C6:C12,1)	=QUARTILE(D6:D12,1)	=QUARTILE(E6:E12,1)	=QUARTILE(F6:F12,1)	=QUARTILE(G6:G12,1)	=QUARTILE(H6:H12,1)	=QUARTILE(I6:I12,1)	=QUARTILE(J6:J12,1)
Quartile3	=QUARTILE(C6:C12,3)	=QUARTILE(D6:D12,3)	=QUARTILE(E6:E12,3)	=QUARTILE(F6:F12,3)	=QUARTILE(G6:G12,3)	=QUARTILE(H6:H12,3)	=QUARTILE(I6:I12,3)	=QUARTILE(J6:J12,3)
IQR	=C22-C21	=D22-D21	=E22-E21	=F22-F21	=G22-G21	=H22-H21	=I22-I21	=J22-J21

Table 2 - Australian Cotton Harvested, Lint Yeild and Production

	Area Harvested			Lint Yield			Cottonseed Production		
	NSW	QLD	AUSTRALIA	NSW	QLD	AUSTRALIA	NSW	QLD	AUSTRALIA
	'000 ha	'000 ha	'000 ha	t/ha	t/ha	t/ha	kt	kt	kt
1990–91	202	77	279	1.678	1.403	1.602	526	160	686
1991–92	225	87	312	1.812	1.688	1.777	563	186	749
1992–93	204	82	286	1.478	1.314	1.431	365.1	162.4	527.5
1993–94	210	84	294	1.301	1.123	1.25	334.2	131.3	465.5
1994–95	157	89	246	1.594	1.402	1.524	286.5	187.1	473.6
1995–96	185.5	118.4	303.9	1.46	1.27	1.386	382.4	212.4	594.8
1996–97	277	119.1	396.1	1.599	1.403	1.54	627.5	232.6	860.1
1997–98	299.3	138.8	438.2	1.588	1.371	1.519	672.3	269	941.3
1998–99	381.7	179.9	561.5	1.243	1.341	1.274	677.5	346.9	1024.4
1999–2000	313	151.3	464.3	1.574	1.638	1.595	695.7	350.4	1046.2
2000–01	327.9	199.4	527.3	1.627	1.432	1.553	740.5	399.5	1140
2001–02	289.7	119.3	409	1.771	1.594	1.719	777.1	276.4	1053.5
2002–03	165.2	59.3	224.5	1.83	1.43	1.724	425.3	120.5	545.8
2003–04	97.2	100.8	198.1	1.849	1.68	1.763	254.2	239.6	493.7
2004–05	162.8	158.1	320.9	2.136	1.881	2.011	491.8	420.5	912.3
2005–06	214.3	121.2	335.5	1.883	1.597	1.779	570.6	273.8	844.4
2006–07	108.7	34.9	143.6	2.223	1.71	2.099	311.1	76.7	387.8
2007–08	41.2	21.4	62.7	2.252	1.864	2.12	131.3	56.5	187.8
2008–09	88	76	164	2.024	1.987	2.007	252	213.6	465.5
2009–10	123.8	84.5	208.3	2.067	1.549	1.857	361.9	185.1	547
2010–11	347.7	242.5	590.2	1.689	1.396	1.569	805.2	464.2	1269.4
2011–12	358.1	241.1	600	2.057	1.907	1.996	1041.5	650.2	1693.5
2012–13	283.5	158.5	442	2.335	2.146	2.267	935.9	481	1416.9

Table 2 - Results

Mean	220.113	119.282609	339.43913	1.785652	1.57069565	1.711391304	531.6783	265.030435	796.7826087
Median	210	118.4	312	1.771	1.549	1.719	526	232.6	749
Mode	#N/A	#N/A	#N/A	#N/A	1.403	#N/A	#N/A	#N/A	465.5
Max	381.7	242.5	600	2.335	2.146	2.267	1041.5	650.2	1693.5
Min	41.2	21.4	62.7	1.243	1.123	1.25	131.3	56.5	187.8
Range	340.5	221.1	537.3	1.092	1.023	1.017	910.2	593.7	1505.7
Quartile1	159.9	83	235.25	1.591	1.399	1.532	348.05	173.75	510.6
Quartile3	294.5	154.7	440.1	2.0405	1.699	1.9265	686.6	348.65	1035.3
IQR	134.6	71.7	204.85	0.4495	0.3	0.3945	338.55	174.9	524.7

Table 2 - Formulas

Mean	=AVERAGE(C29:C51)	=AVERAGE(D29:D51)	=AVERAGE(E29:E51)	=AVERAGE(F29:F51)	=AVERAGE(G29:G51)	=AVERAGE(H29:H51)	=AVERAGE(I29:I51)	=AVERAGE(J29:J51)	=AVERAGE(K29:K51)
Median	=MEDIAN(C29:C51)	=MEDIAN(D29:D51)	=MEDIAN(E29:E51)	=MEDIAN(F29:F51)	=MEDIAN(G29:G51)	=MEDIAN(H29:H51)	=MEDIAN(I29:I51)	=MEDIAN(J29:J51)	=MEDIAN(K29:K51)
Mode	=MODE(C29:C51)	=MODE(D29:D51)	=MODE(E29:E51)	=MODE(F29:F51)	=MODE(G29:G51)	=MODE(H29:H51)	=MODE(I29:I51)	=MODE(J29:J51)	=MODE(K29:K51)
Max	=MAX(C29:C51)	=MAX(D29:D51)	=MAX(E29:E51)	=MAX(F29:F51)	=MAX(G29:G51)	=MAX(H29:H51)	=MAX(I29:I51)	=MAX(J29:J51)	=MAX(K29:K51)
Min	=MIN(C29:C51)	=MIN(D29:D51)	=MIN(E29:E51)	=MIN(F29:F51)	=MIN(G29:G51)	=MIN(H29:H51)	=MIN(I29:I51)	=MIN(J29:J51)	=MIN(K29:K51)
Range	=C57-C58	=D57-D58	=E57-E58	=F57-F58	=G57-G58	=H57-H58	=I57-I58	=J57-J58	=K57-K58
Quartile 1	=QUARTILE(C29:C51,1)	=QUARTILE(D29:D51,1)	=QUARTILE(E29:E51,1)	=QUARTILE(F29:F51,1)	=QUARTILE(G29:G51,1)	=QUARTILE(H29:H51,1)	=QUARTILE(I29:I51,1)	=QUARTILE(J29:J51,1)	=QUARTILE(K29:K51,1)
Quartile 3	=QUARTILE(C29:C51,3)	=QUARTILE(D29:D51,3)	=QUARTILE(E29:E51,3)	=QUARTILE(F29:F51,3)	=QUARTILE(G29:G51,3)	=QUARTILE(H29:H51,3)	=QUARTILE(I29:I51,3)	=QUARTILE(J29:J51,3)	=QUARTILE(K29:K51,3)
IQR	=C61-C60	=D61-D60	=E61-E60	=F61-F60	=G61-G60	=H61-H60	=I61-I60	=J61-J60	=K61-K60

Part B – Report

Introduction:

In the last decade the cotton industry in Australia had been through a lot of change and economic growth. In 2002 Roundup Ready cotton was introduced and from 2002 until 2004 the cotton industry went through the worst drought in 100 years and resulted in 60 per cent crop reduction size. Then in 2005 to 2006, 95 per cent of Australia's cotton growers planted transgenic varieties, accounting for 80 per cent of total cotton crops. In 2007 Australia was hit with another drought and severely impacted the crops, making them the smallest in 30 years. Then in 2008 and 2009 a new path was set for cotton Australia as it merged with a research partner, the Australian Cotton Growers Research Association. In 2010 technology was brought into the cotton industry as they launch an internet-based program and significant rain commenced after nearly a decade of drought and reached a new record of 4.1 million bales of cotton.

Aim:

The aim of this investigation is to compare the data from the last decade in the Australian cotton industry to confirm whether or not my hypothesis is accurate.

Hypothesis:

In the last decade, Australia's area of cotton harvested has decreased, however the export of cotton from Australia has increased.

Method:

1. Collect data in table 1 and 2 from link provided, then put both tables into an Excel spreadsheet.
2. For each table, using excel and formulas for each, work out the mean (average), five number summaries (median, mode, maximum, minimum, range), the quartiles (1 and 3), and the inter-quartile range.
3. Using Ctrl ~ the formulas used to figure out the mean, five number summaries, quartiles and inter-quartile range, all appear on the excel spreadsheet. Copy and paste all information and tables into a word document.
4. Write out a hypothesis and using the tables and results work out what information is needed to calculate whether or not the hypothesis is correct.
5. Create other table/tables that include the data needed for the hypothesis. If needed, work out the mean, five number summaries, quartiles and inter-quartile range for just that bit of data collected (e.g. Volume of Australian Exports of Raw Cotton).
6. Next create graphs using the hypothesis and information collected (bar graph, pie chart, line graph, etc.)
7. Write a small description for each graph and tables explaining what each one means and what it shows.
8. Complete analysis and conclusion stating whether or not the hypothesis is true.

Results:

Table 3 – Volume of Australian Exports of Raw Cotton

Year	Australia
2005-06	650
2006-07	487
2007-08	266
2008-09	260
2009-10	395
2010-11	505
2011-12	994
2012-13	1306

Results - Table 3	
Mean	607.875
Median	496
mode	#N/A
Max	1306
Min	260
Range	1046
Quartile1	362.75
Quartile3	736
IQR	373.25

Table 3 - Formulas	
Mean	=AVERAGE(M5:M12)
Median	=MEDIAN(M5:M12)
mode	=MODE(M5:M12)
Max	=MAX(M5:M12)
Min	=MIN(M5:M12)
Range	=M17-M18
Quartile1	=QUARTILE(M5:M12,
Quartile3	=QUARTILE(M5:M12,
IQR	=M21-M20

Graph 1 – Bar Graph

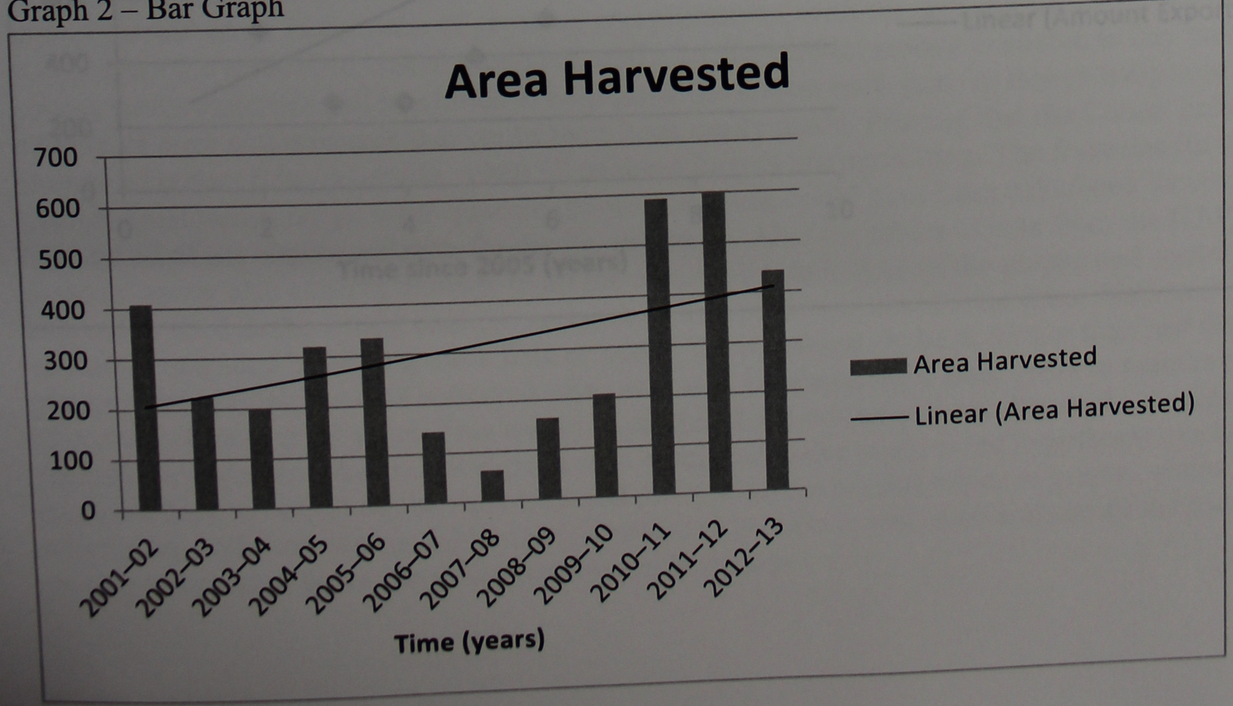
Table 4 – Area Harvested, Australia

Year	Australia
	'000 ha
2000–01	527.3
2001–02	409
2002–03	224.5
2003–04	198.1
2004–05	320.9
2005–06	335.5
2006–07	143.6
2007–08	62.7
2008–09	164
2009–10	208.3
2010–11	590.2
2011–12	600
2012–13	442

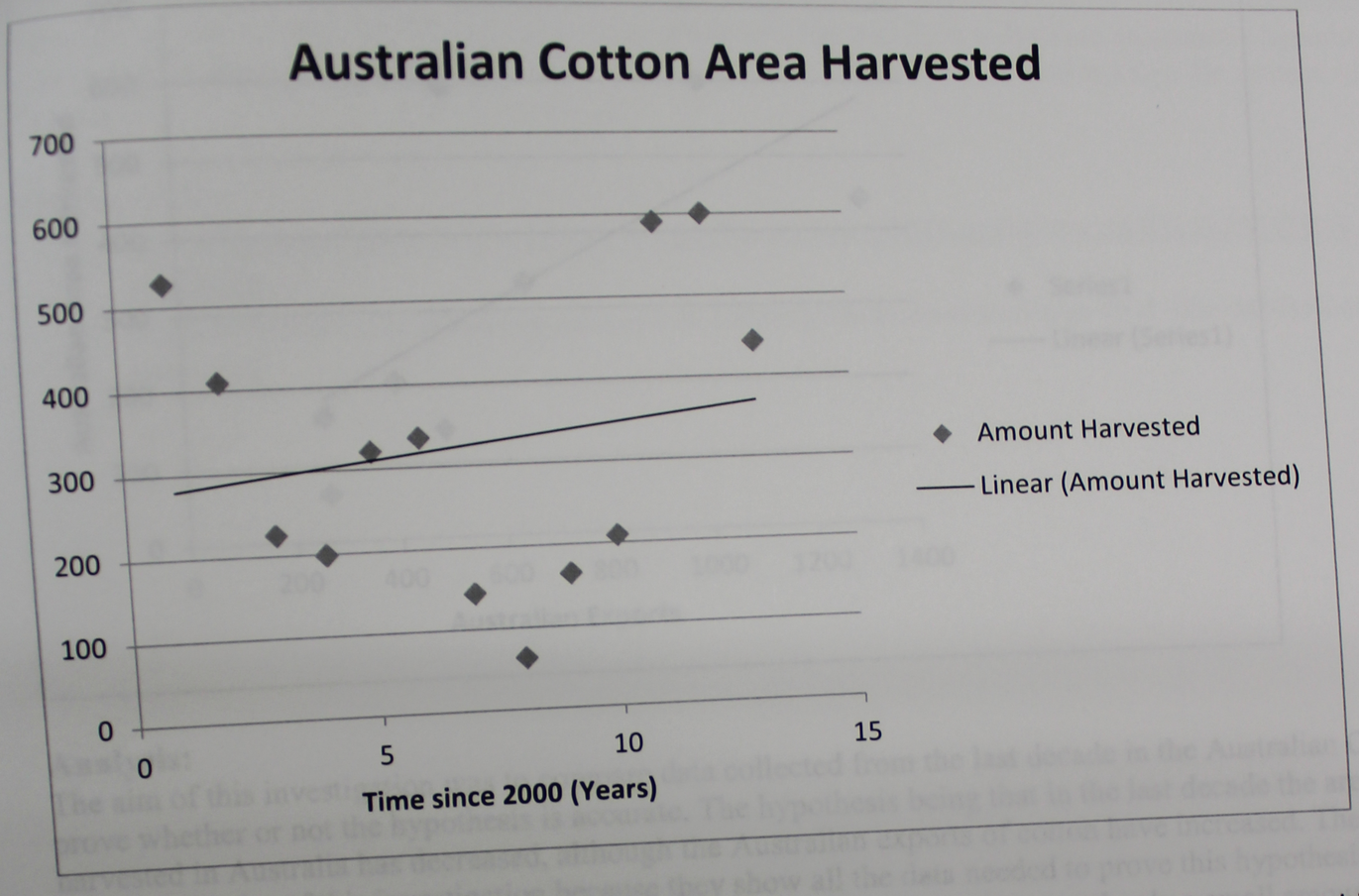
Table 4 - Results	
Mean	325.0846
Median	320.9
Mode	#N/A
Max	600
Min	62.7
Range	537.3
Quartile1	198.1
Quartile3	442
IQR	243.9

Table 4 - Formulas	
Mean	=AVERAGE(Q38:Q50)
Median	=MEDIAN(Q38:Q50)
Mode	=MODE(Q38:Q50)
Max	=MAX(Q38:Q50)
Min	=MIN(Q38:Q50)
Range	=Q57-Q58
Quartile1	=QUARTILE(Q38:Q50
Quartile3	=QUARTILE(Q38:Q50
IQR	=Q61-Q60

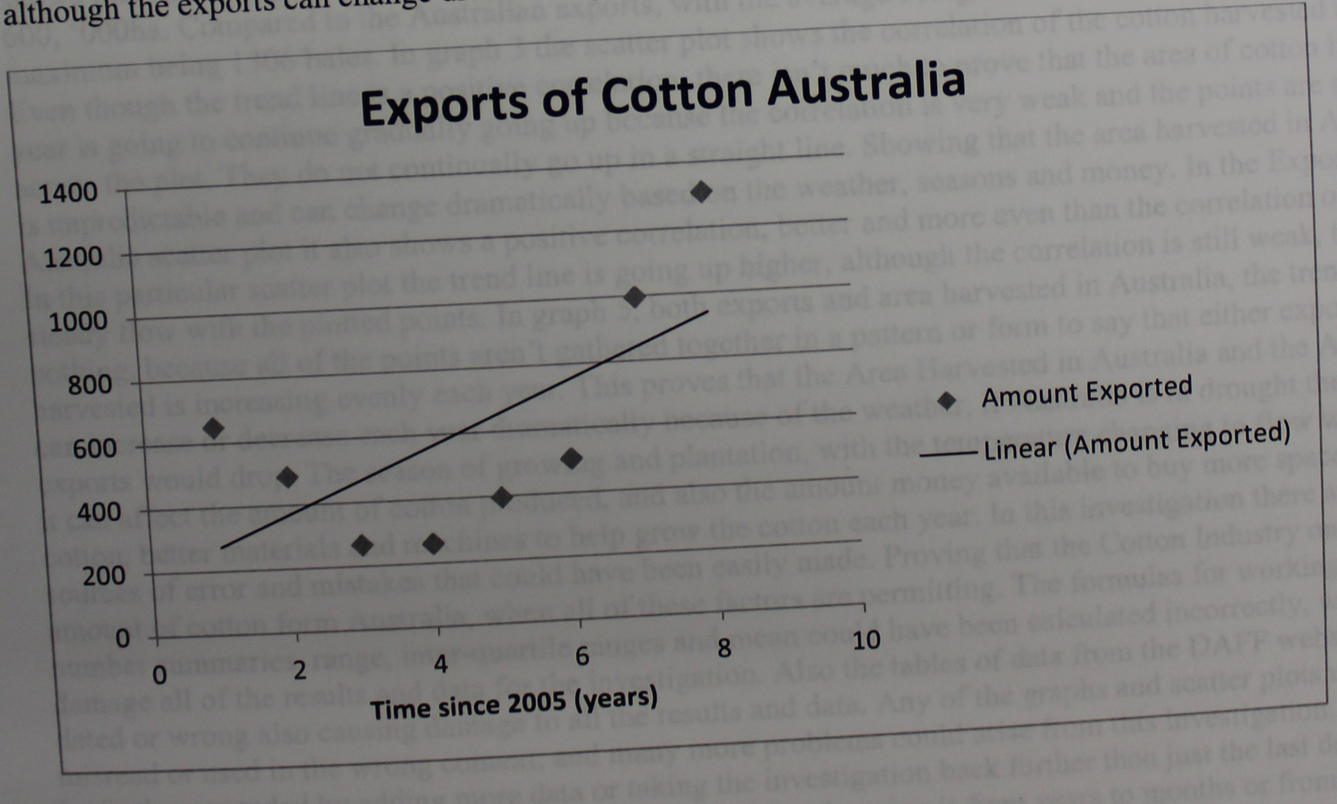
Graph 2 – Bar Graph



Graph 3 - Scatter Plot
This scatter plot shows the Australian cotton that had been harvested in 2000 until 2013. As shown the scatter plot has no correlation or pattern, proving that the cotton harvested each year in Australia is unpredictable and unsteady.

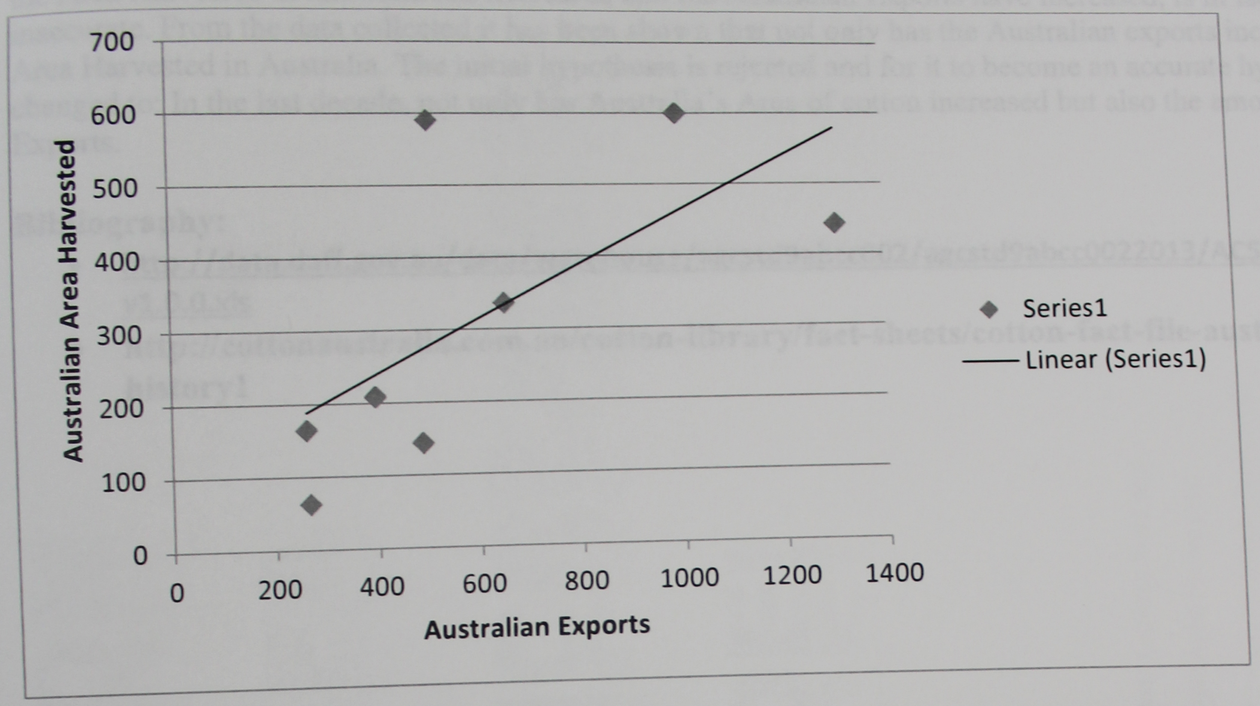


Graph 4 – Scatter Plot
This scatter plot shows the Australian Cotton Exports since 2005. Clearly this graph shows a positive correlation, although the exports can change dramatically each year because of drought, rain and natural disasters.



Graph 5 – Scatter Plot

This scatter plot is both the Australian Cotton Exports and the area of cotton harvested in Australia. The plot shows how well Australia is doing with the cotton industry and the difference between area harvested and cotton exported.



Analysis:

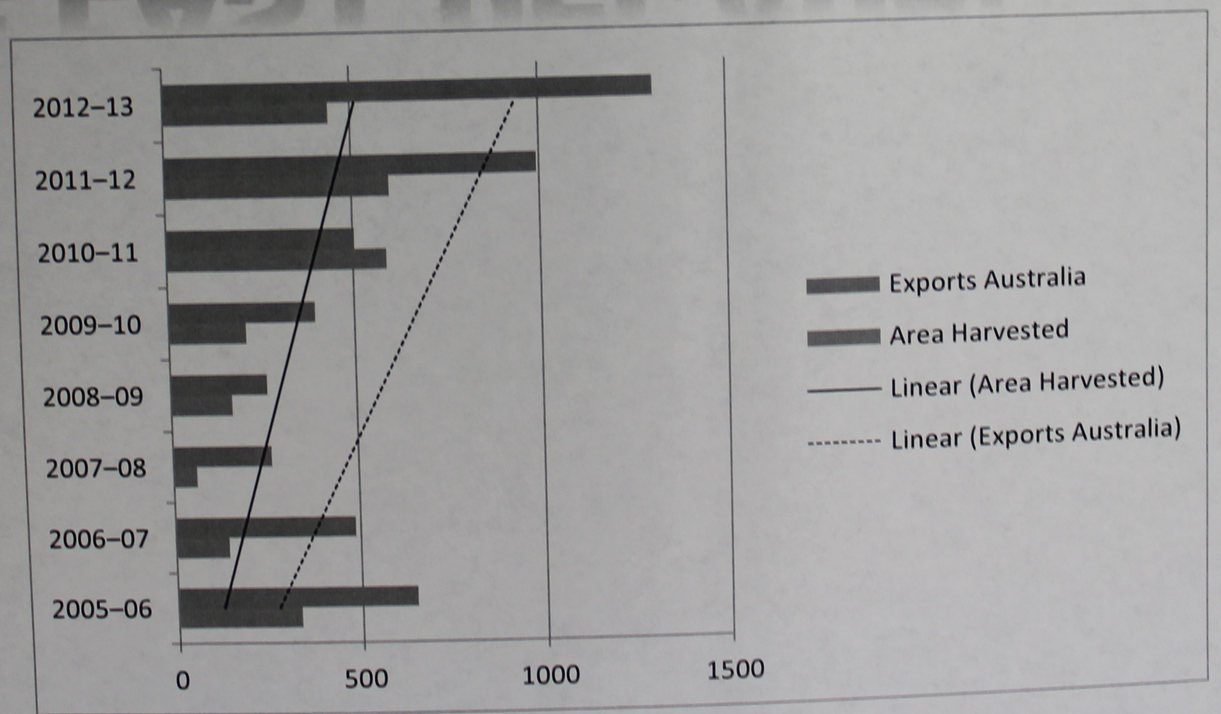
The aim of this investigation was to compare data collected from the last decade in the Australian Cotton Industry to prove whether or not the hypothesis is accurate. The hypothesis being that in the last decade the area of cotton harvested in Australia has decreased, although the Australian exports of cotton have increased. The results recorded relate to the aim of this investigation because they show all the data needed to prove this hypothesis accurate. It has been shown that in the last decade the area harvested in Australia has increased only a small amount, and in table 4 it shows that the average for area harvested is 325.0846, '000 ha and the maximum area harvested in the last decade is 600, '000ha. Compared to the Australian exports, with the average being 607.875 bales, shown in table 3, and the maximum being 1306 bales. In graph 3 the scatter plot shows the correlation of the cotton harvested in the last decade. Even though the trend line is a positive correlation, there isn't much to prove that the area of cotton harvested each year is going to continue gradually going up because the correlation is very weak and the points are spread out all across the plot. They do not continually go up in a straight line. Showing that the area harvested in Australia each year is unpredictable and can change dramatically based on the weather, seasons and money. In the Exports of Cotton Australia scatter plot it also shows a positive correlation, better and more even than the correlation of Area Harvested. In this particular scatter plot the trend line is going up higher, although the correlation is still weak, there is more of a steady flow with the plotted points. In graph 5, both exports and area harvested in Australia, the trend line is proving nothing, because all of the points aren't gathered together in a pattern or form to say that either exports or area harvested is increasing evenly each year. This proves that the Area Harvested in Australia and the Australian Exports can increase or decrease each year dramatically because of the weather, if Australia is in drought then the area and exports would drop. The season of growing and plantation, with the temperature changing to flow with climate change it can affect the amount of cotton produced, and also the amount money available to buy more space for growing cotton, better materials and machines to help grow the cotton each year. In this investigation there are many possible sources of error and mistakes that could have been easily made. Proving that the Cotton Industry only produces a great amount of cotton form Australia, when all of these factors are permitting. The formulas for working out the five number summaries, range, inter-quartile ranges and mean could have been calculated incorrectly, which would damage all of the results and data for the investigation. Also the tables of data from the DAFF website could be out dated or wrong also causing damage to all the results and data. Any of the graphs and scatter plots used could be misread or used in the wrong context, and many more problems could arise from this investigation. The report could be further extended by adding more data or taking the investigation back further than just the last decade and could be improved by making the data collected more accurate, by changing it from years to months or from years to a number of years such as every 2 years. This would mean that there would be more data and a larger amount of information on the area harvested and Australian exports so it would be easier to show the hypothesis true or false. The investigation was quite hard to collect all the right data and put it in all the correct tables or graphs, although the data and information collected was useful because it helped to be able to use excel and use all the formulas to work out the five number summaries, mean, range and inter-quartile ranges.

Conclusion:

The aim of this investigation was to compare data from the Australian cotton Industry in the past decade to discover whether or not the hypothesis was accurate. It can be concluded that the hypothesis stated, being that in the last decade the Area Harvested in Australia has decreased and the Australian Exports have increased, is in fact incorrect, and inaccurate. From the data collected it has been shown that not only has the Australian exports increased, but also the Area Harvested in Australia. The initial hypothesis is rejected and for it to become an accurate hypothesis it could be changed to: In the last decade, not only has Australia's Area of cotton increased but also the amount of Australian Exports.

Bibliography:

- http://data.daff.gov.au/data/warehouse/agcstd9abcc002/agcstd9abcc0022013/ACS2013_Cotton_Tables_v1.0.0.xls
- **http://cottonaustralia.com.au/cotton-library/fact-sheets/cotton-fact-file-australian-cotton-history1**

Part C - Poster.

AUSTRALIA'S COTTON EXPORTED, AND AREA HARVESTED HAS INCREASED IN THE LAST DECADE!