

Question 5

Observed Frequencies

	A	B	Total
1	12	38	50
2	38	37	75
Total	50	75	125

Expected Frequencies

	A	B	Total
1	20	30	
2	30	45	
Total			

$(f-e)^2/e$ f = observed freq, e = expected freq

	A	B
1	3.2	2.133333
2	2.133333	1.422222
Chi-Square	8.888889	
df = (j-1)(k-	1	

Question 6

Observed Frequencies

	Tint	No Tint	Total
Male	53	417	470
Female	75	395	470
Total	128	812	940

Expected Frequencies

	Tint	No Tint	Total
Male	64	406	470
Female	64	406	470
Total	128	812	940

$(f-e)^2/e$

	Tint	No Tint
Male	1.890625	0.29803
Female	1.890625	0.29803
Chi Squared	4.377309	
df = (j-1)(k-1)	1	

If 64 males preferred window tinting

Observed Frequencies

	Tint	No Tint	Total
Male	64	406	470
Female	75	395	470
Total	139	801	940

Expected Frequencies

	Tint	No Tint
Male	69.5	400.5
Female	69.5	400.5

(f-e)^2/e

	Tint	No Tint	
Male	0.435252	0.075531	
Female	0.435252	0.075531	
	Chi Squared		1.021565

Question 7

Observed Frequencies

	Job Networking		
	Yes	No	
B2B	275	75	350
B2C	280	350	630
	555	425	980

Expected Frequencies

	Job Networking	
	Yes	No
B2B	198.2143	151.7857
B2C	356.7857	273.2143

(f-e)^2/e

	Yes	No	
B2B	29.74582	38.84454	
B2C	16.52545	21.5803	
	Chi Sq		106.6961

Observed Frequencies

	Video Website		
	Yes	No	
B2B	152	198	350
B2C	279	351	630
	431	549	980

Expected Frequencies

	Video Website	
	Yes	No
B2B	153.9286	196.0714
B2C	277.0714	352.9286

(f-e)^2/e

	Yes	No	
B2B	0.024163	0.01897	
B2C	0.013424	0.010539	
	Chi Sq		0.067095

Question 8

Observed Frequencies

	Yes	No	
Automotive	104	296	400
Energy/Utilities/Mining	108	292	400
Hospitality/Leisure	120	280	400
Industrial Production	120	280	400
Retail/Consumer	220	180	400
	672	1328	2000

Expected Frequencies

	Yes	No
Automotive	134.4	265.6
Energy/Utilities/Mining	134.4	265.6
Hospitality/Leisure	134.4	265.6
Industrial Production	134.4	265.6
Retail/Consumer	134.4	265.6

(f-e)^2/e

	Yes	No
Automotive	6.87619	3.479518
Energy/Utilities/Mining	5.185714	2.624096
Hospitality/Leisure	1.542857	0.780723
Industrial Production	1.542857	0.780723
Retail/Consumer	54.51905	27.58795
	Chi Sq	104.9197

Question 10

Observed Frequency

	18-22	23-35	36-49	50-64	65_and_over	Total
Several_times_	19	19	9	3	1	51
About_once_	27	37	15	5	2	86
3-5_times_	31	44	30	9	1	115
1-2_times_	35	67	36	19	10	167
Every_few_	24	66	50	28	6	174
Less_Often	14	57	58	63	17	209
Never	4	14	42	66	24	150
Total	154	304	240	193	61	951

Expected Frequency

	18-22
Several_times_	8.258675
About_once_	13.92639
3-5_times_	18.6225
1-2_times_	27.04311
Every_few_	28.17666
Less_Often	33.84437
Never	24.29022
	154

Residuals	18-22	23-35	36-49	50-64	65_and_over	
Several_times_	10.7413	2.6972	-3.8707	-7.3502	-2.2713	-0.05363
About_once_	13.0736	9.5089	-6.7035	-12.4532	-3.5163	-0.09043
3-5_times_	12.3775	7.2387	0.9779	-14.3386	-6.3764	-0.12093
1-2_times_	7.9569	13.6162	-6.1451	-14.8917	-0.7119	-0.1756
Every_few_	-4.1767	10.3785	6.0883	-7.3123	-5.1609	-0.18297
Less_Often	-19.8444	-9.8097	5.2555	20.5846	3.5941	-0.21977
Never	-20.2902	-33.9495	4.1451	35.5584	14.3785	-0.15773
	-0.1619	-0.3197	-0.2524	-0.2029	-0.0641	

Chi Sq	18-22
Several_times_	13.9703
About_once_	12.2730
3-5_times_	8.2267
1-2_times_	2.3412
Every_few_	0.6191
Less_Often	11.6356
Never	16.9489

Question 11

	Top	Middle	Bottom
Annually	53	310	42
Every 2 to 4	44	256	25
Never	8	150	30

23-35	36-49	50-64	65_and_over	
16.30284	12.87066	10.35016	3.271293	51
27.49106	21.70347	17.45321	5.516299	86
36.7613	29.02208	23.33859	7.376446	115
53.38381	42.14511	33.89169	10.71188	167
55.62145	43.91167	35.3123	11.16088	174
66.80967	52.74448	42.41535	13.40589	209
47.94953	37.85489	30.44164	9.621451	150
304	240	193	61	

23-35	36-49	50-64	65_and_over	
0.4462	1.1640	5.2197	1.5770	
3.2891	2.0705	8.8856	2.2414	
1.4254	0.0330	8.8092	5.5120	
3.4730	0.8960	6.5433	0.0473	
1.9366	0.8441	1.5142	2.3864	
1.4404	0.5237	9.9900	0.9636	
24.0372	0.4539	41.5351	21.4877	
Chi Sq				224.7603