Obs	id	carrot	gender	latitude	lenses
1	1	0	1	33	1
2	2	0	2	46	1
3	3	1	1	32	1
4	4	0	2	26	0
5	5	1	1	25	1

Is Gender a Risk Factor For Requiring Corrective Lenses Times 10

The FREQ Procedure

Frequency	Table of gender by lenses		
	lenses		
gender	Corrective lenses	No corrective lenses	Total
Female	300	220	520
Male	230	250	480
Total	530	470	1000

Statistics for Table of gender by lenses

Statistic	DF	Value	Prob
Chi-Square	1	9.5755	0.0020
Likelihood Ratio Chi-Square	1	9.5881	0.0020
Continuity Adj. Chi-Square	1	9.1871	0.0024
Mantel-Haenszel Chi-Square	1	9.5659	0.0020
Phi Coefficient		0.0979	
Contingency Coefficient		0.0974	
Cramer's V		0.0979	

Fisher's Exact Test	
Cell (1,1) Frequency (F)	300
Left-sided Pr <= F	0.9992
Right-sided Pr >= F	0.0012
Table Probability (P)	0.0004
Two-sided Pr <= P	0.0023

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.4822	1.1547	1.9026
Relative Risk (Column 1)	1.2040	1.0691	1.3559
Relative Risk (Column 2)	0.8123	0.7118	0.9270

Sample Size = 1000

Sample Size For POWER=0.75

The POWER Procedure
Pearson Chi-square Test for Proportion Difference

Fixed Scenario Elements	
Distribution	Asymptotic normal
Method	Normal approximation
Null Relative Risk	1
Alpha	0.05
Reference (Group 1) Proportion	0.2
Relative Risk	2
Nominal Power	0.75
Number of Sides	2

Computed N per Group	
Actual Power	N per Group
0.750	72

Sample Size For POWER=0.80

The POWER Procedure
Pearson Chi-square Test for Proportion Difference

Fixed Scenario Elements	
Distribution	Asymptotic normal
Method	Normal approximation
Null Relative Risk	1
Alpha	0.05
Reference (Group 1) Proportion	0.2
Relative Risk	2
Nominal Power	0.8
Number of Sides	2

Computed N per Group	
Actual Power	N per Group
0.804	82

Sample Size For POWER=0.85

The POWER Procedure
Pearson Chi-square Test for Proportion Difference

Fixed Scenario Elements	
Distribution	Asymptotic normal
Method	Normal approximation
Null Relative Risk	1
Alpha	0.05
Reference (Group 1) Proportion	0.2
Relative Risk	2
Nominal Power	0.85
Number of Sides	2

Computed N per Group	
Actual Power	N per Group
0.851	93

Sample Size For POWER=0.90

The POWER Procedure
Pearson Chi-square Test for Proportion Difference

Fixed Scenario Elements	
Distribution	Asymptotic normal
Method	Normal approximation
Null Relative Risk	1
Alpha	0.05
Reference (Group 1) Proportion	0.2
Relative Risk	2
Nominal Power	0.9
Number of Sides	2

Computed N per Group	
Actual Power	N per Group
0.902	109

Sample Size For POWER=0.95

The POWER Procedure
Pearson Chi-square Test for Proportion Difference

Fixed Scenario Elements	
Distribution	Asymptotic normal

Fixed Scenario Elements	
Method	Normal approximation
Null Relative Risk	1
Alpha	0.05
Reference (Group 1) Proportion	0.2
Relative Risk	2
Nominal Power	0.95
Number of Sides	2

Computed N per Group	
Actual Power	**N per Group**
0.951	134