

Handout 6: Calculate marginal distributions, conditional distribution of rating by genre, and odds ratio

Rating	SciFi/Fantasy	Action	Total
R or greater	66	106	172
PG 13 or less	196	101	297
Total	66+196=262	207	262+207=469, 172+297=469

Distribution of ratings for sciFi/fantasy movies:

$$66/262=0.25 \text{ and } 196/262=0.75$$

25% of SciFi/Fantasy movies were R-rated
75% of SciFi/Fantasy movies had less than R rating

Distribution of ratings for action movies:

$$106/207=0.51 \text{ and } 101/207=0.49$$

51% of action movies were R-rated
49% of action movies had less than R rating

Odds ratio:

Name (Print and Sign): _____