

(10 points - 20 minutes)

4. Use the data in the table to test the idea that the use of some "slang" terms is independent of age.

The data represent a stratified random sample of 400 people from Los Angeles.

(Use $\alpha = 0.025$ for this test)

| Most used Slang Term | Age Group | | | | Total |
|----------------------|-----------|----------|----------|------|-------|
| | 10 to 20 | 21 to 40 | 41 to 60 | > 60 | |
| "I'm like ... " | 88 | 50 | 10 | 2 | 150 |
| "totally" | 10 | 40 | 40 | 10 | 100 |
| "far out" | 2 | 10 | 50 | 88 | 150 |
| Total | 100 | 100 | 100 | 100 | 400 |

Claim: _____

H₀: _____

H₁: _____