5. A car manufacturer has four plants, say Plants A,B,C and D. The CEO would like to know if worker ratings differ among the four plants. You (VP of HR) must decide if the workers rating differ proportionately among the plants. You randomly select 239 worker ratings from the four plants. The table below shows the number of workers rated as exceeding expectations, meeting expectations, or below expectations.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rating | PLANT A | PLANT B | PLANT C | PLANT D |
| Exceeds expectations | 13 | 12 | 10 | 9 |
| Meets expectations | 34 | 36 | 46 | 33 |
| Below expectations | 6 | 15 | 14 | 11 |

1. STATE THE NULL AND ALTERNATE HYPOTHESIS
2. IF H0 IS TRUE, WHAT IS THE EXPECTED NUMBER OF WORKERS RATED “EXCEEDS EXPECTATIONS” IN PLANT C?
3. WHAT DO YOU REPORT TO THE CEO AND WHY?