

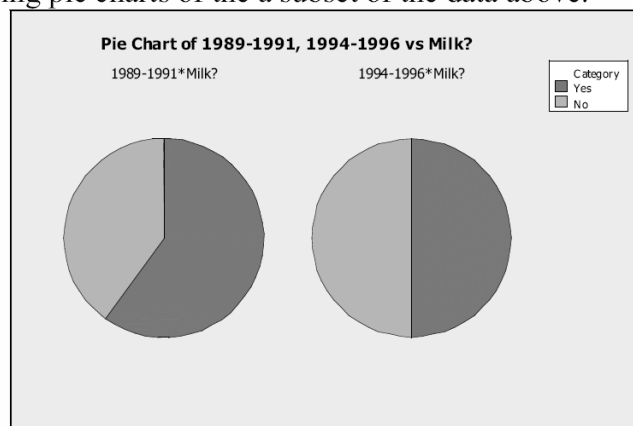
Show all necessary work and place your answers on the spaces provided.

Drinking Milk.

Has the percentage of young girls drinking milk changed over time? The following table is consistent with the results from “Beverage Choices of Young Females: Changes and Impact on Nutrient Intakes” (Shanthy A. Bowman, *Journal of the American Dietetic Association*, 102(9), pp. 1234-1239):

| | | Nationwide Food Survey Years | | |
|-------------------|--------------|------------------------------|------------|--------------|
| | | 1987-1988 | 1989-1991 | 1994-1996 |
| Drinks Fluid Milk | Yes | 354 | 502 | 366 |
| | No | 226 | 335 | 366 |
| | Total | 580 | 837 | 732 |
| | | | | Total |
| | | | | 1222 |
| | | | | 927 |
| | | | | 2149 |

- Find the following:
 - What percent of the young girls reported that they drink milk? _____
 - What percent of the young girls were in the 1989-1991 survey? _____
 - What percent of the young girls who reported that they drink milk were in the 1989-1991 survey? _____
 - What percent of the young girls in 1989-1991 reported that they drink milk? _____
- What is the marginal distribution of milk consumption?
- Do you think that milk consumption by young girls is independent of the nationwide survey year? Use statistics to justify your reasoning.
- Consider the following pie charts of the a subset of the data above:



Do the pie charts above indicate that milk consumption by young girls is independent of the nationwide survey year? Explain.