**2.** For a marketing survey, 200 customers were classified according to their age (in years) and their favorite type of donut.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age of Customer | Glazed | Chocolate-covered | Crème-filled | Cake |
| <21 | 3 | 25 | 10 | 7 |
| 21-30 | 5 | 23 | 26 | 10 |
| 31-45 | 15 | 12 | 3 | 20 |
| >45 | 29 | 5 | 1 | 6 |

1. What is the probability that a person prefers Creme-filled donut and is age 30 years or less?
2. What is the probability that either a person’s favorite donut is glazed or that the person is less than 21 year of age?
3. What is the probability that a person is between 21 and 30 years of age if that person favors chocolate-covered donuts?
4. Are age and favorite donut independent variables? Why or why not?