A group of 3 people taste regular fat Tillamook Ice Cream, and a separate group of 3 people taste low-fat Tillamook Ice Cream. Both are vanilla flavor. Each person scores the ice cream s/he tastes on a scale from 1 – 10. The scores for regular are 9, 7, 10. The scores for low-fat ice cream are 8, 9, 10. Use an appropriate test to determine if the distribution of scores is the same for the two types of ice cream.

When my son was in 6th grade, his science projects was the following: 20 people taste both regular fat Tillamook Ice Cream and low-fat Tillamook Ice Cream sequentially. Each person declares which s/he prefers. 13 prefer regular fat ice cream. 7 prefer low-fat ice cream. Test the null hypothesis that preference is equal between the two types of ice cream against the alternative that people tent to prefer regular fat ice cream. I didn’t realize until this experiment that p-values really aren’t intuitive.

In children receiving cardiopulmonary resuscitation, test whether illness category is associated with return of spontaneous circulation.

|  |  |  |
| --- | --- | --- |
|  | Return of spontaneous circulation | |
| Illness Category | Yes | No |
| Cardiac | 2 | 5 |
| Non-cardiac | 3 | 4 |

Test whether the following numbers come from a N(0,1) distribution:



Test whether they come from a N(μ,1) distribution. The outcome of the sample mean is -0.166.