

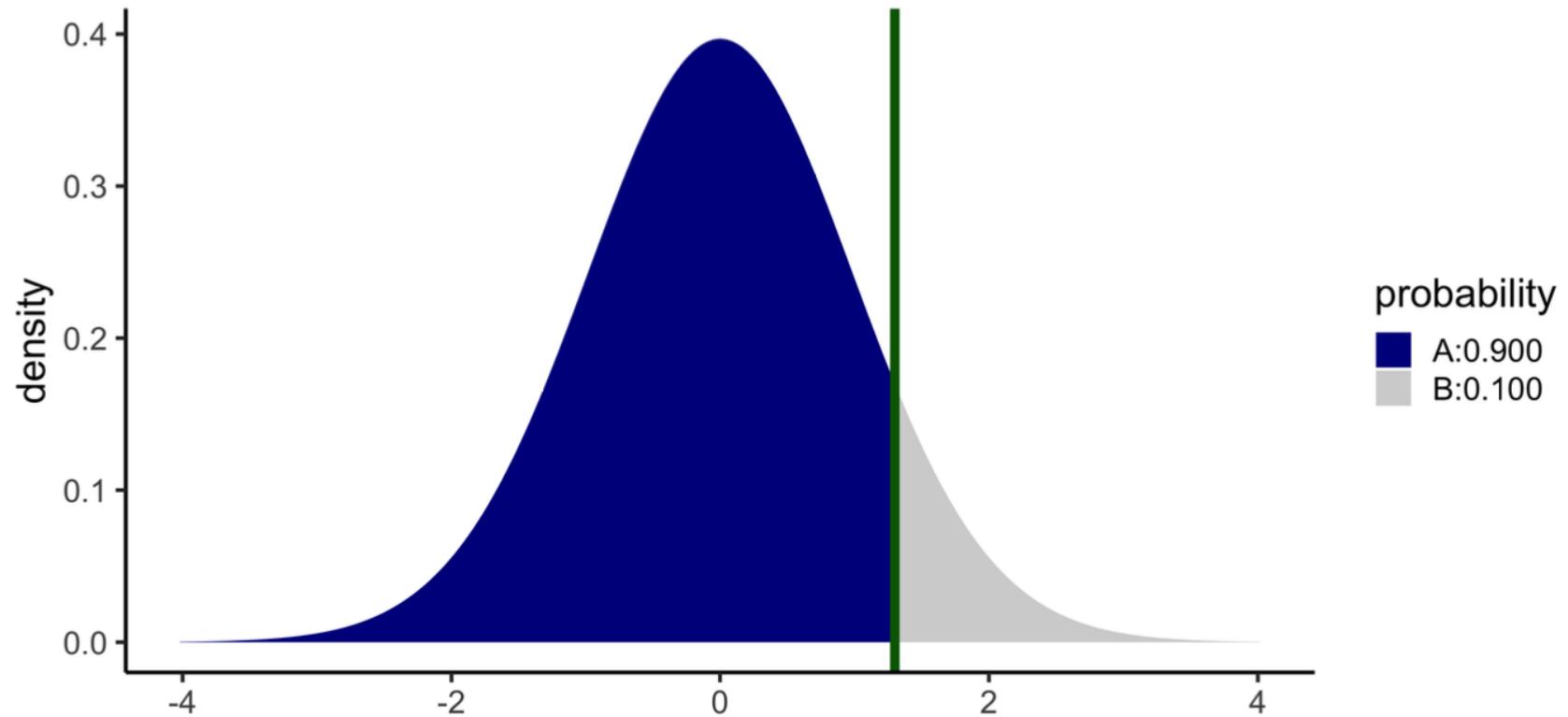
Review of p-value computation

Data Analysis for Psychology in R1

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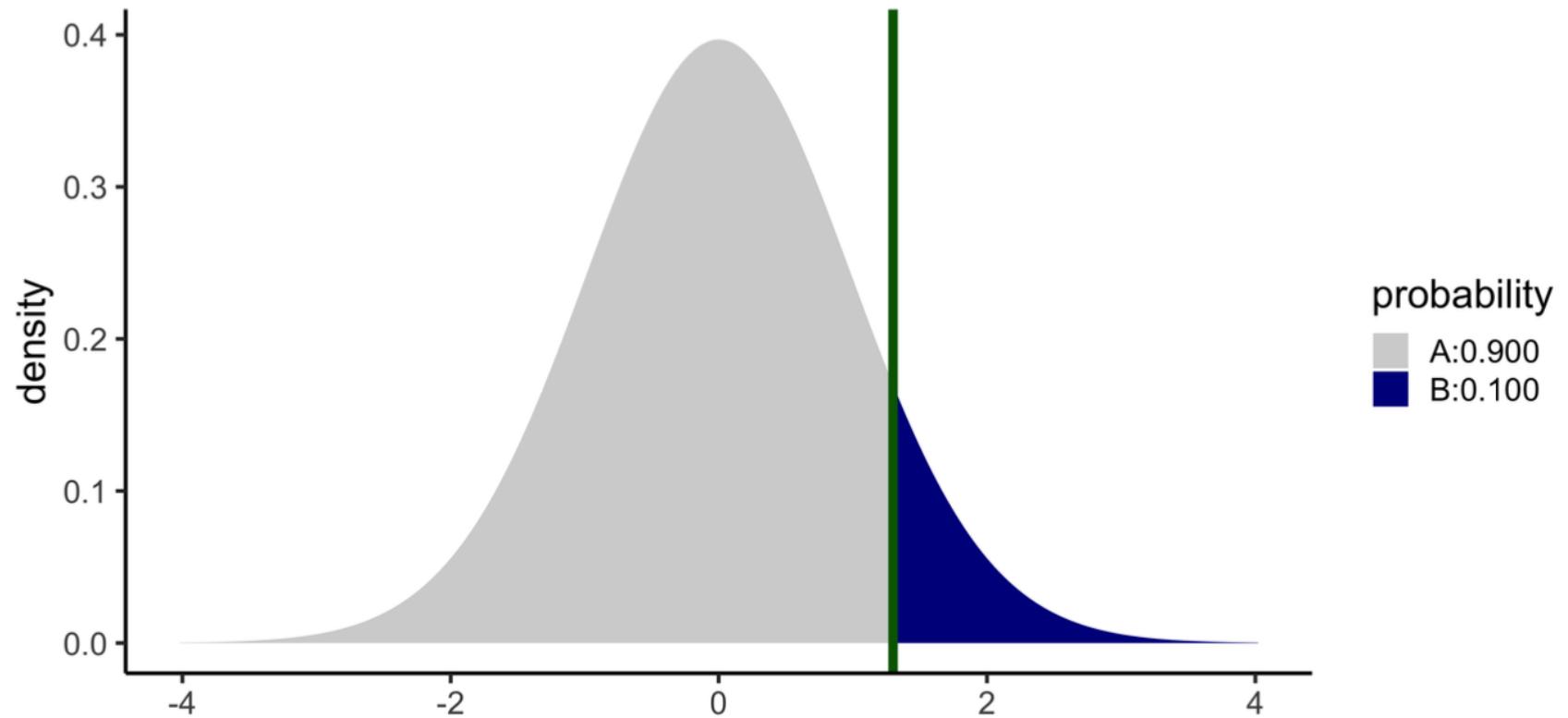
What if the observed t-statistic is positive?

If $H_1: \mu < \mu_0$ and tobs = $t = +1.3$, pvalue = A



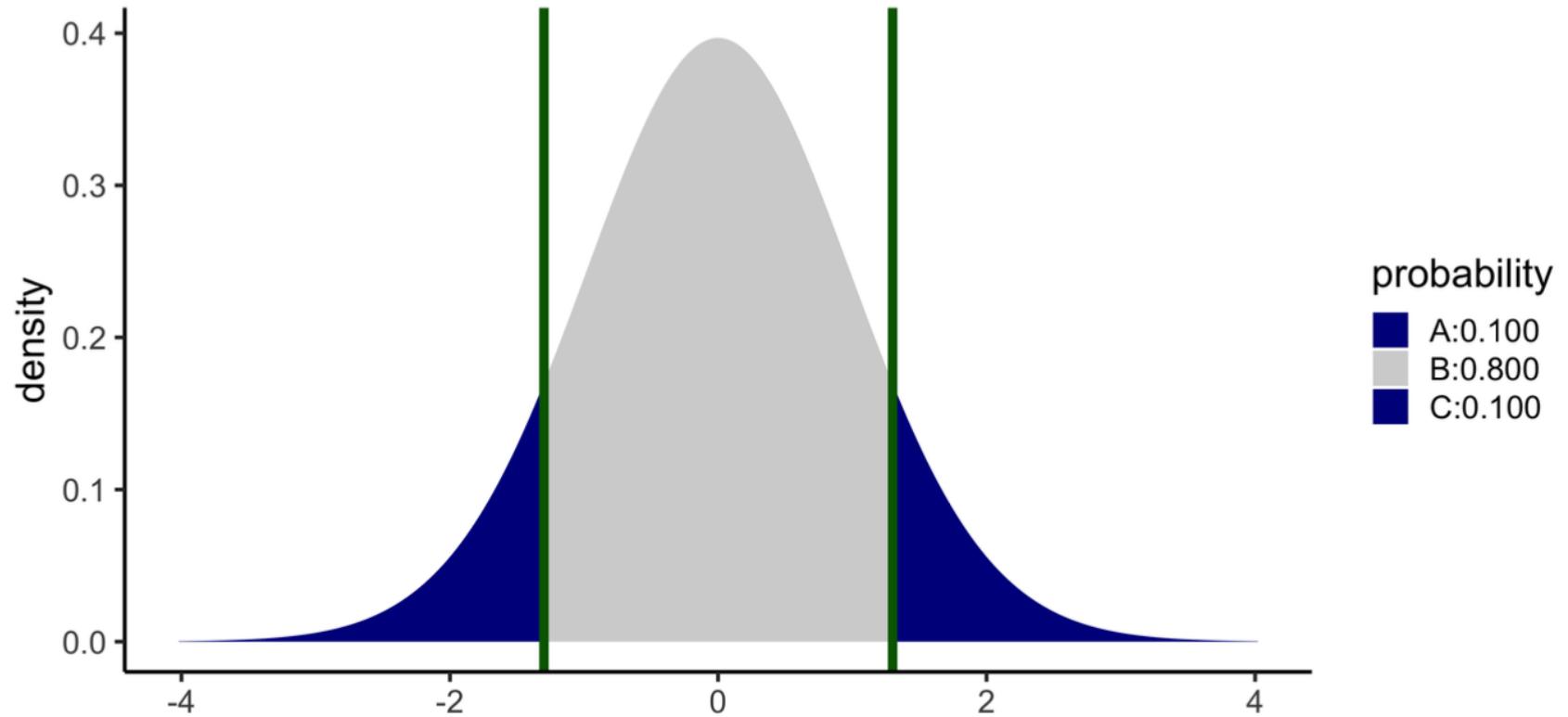
`pt(tobs, df = n-1, lower.tail = TRUE)`

If $H_1: \mu > \mu_0$ and tobs = $t = +1.3$, pvalue = B



`pt(tobs, df = n-1, lower.tail = FALSE)`

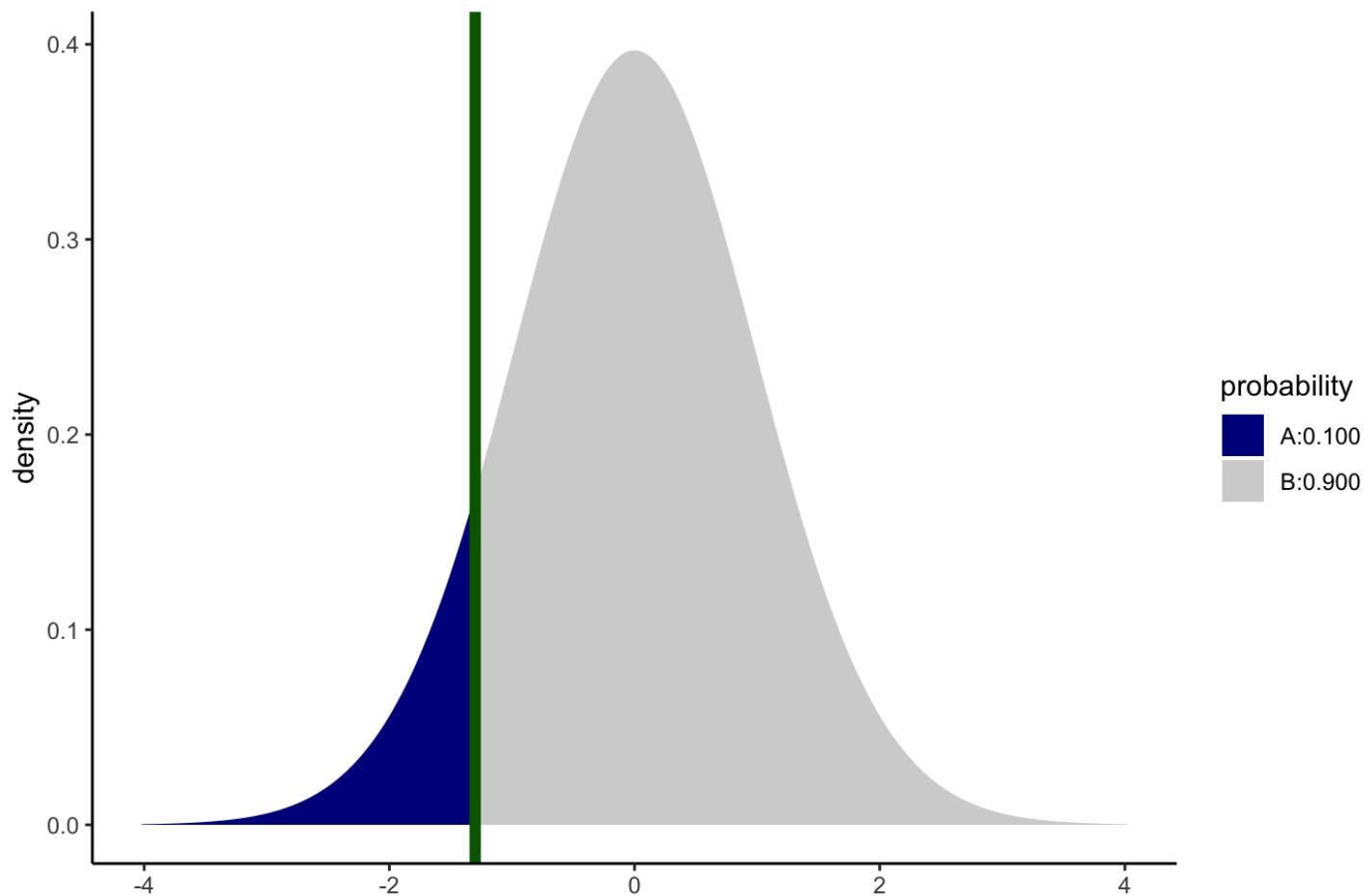
If $H_1: \mu \neq \mu_0$ and tobs = $t = +1.3$, pvalue = A + C



`2 * pt(abs(tobs), df = n-1, lower.tail = FALSE)`

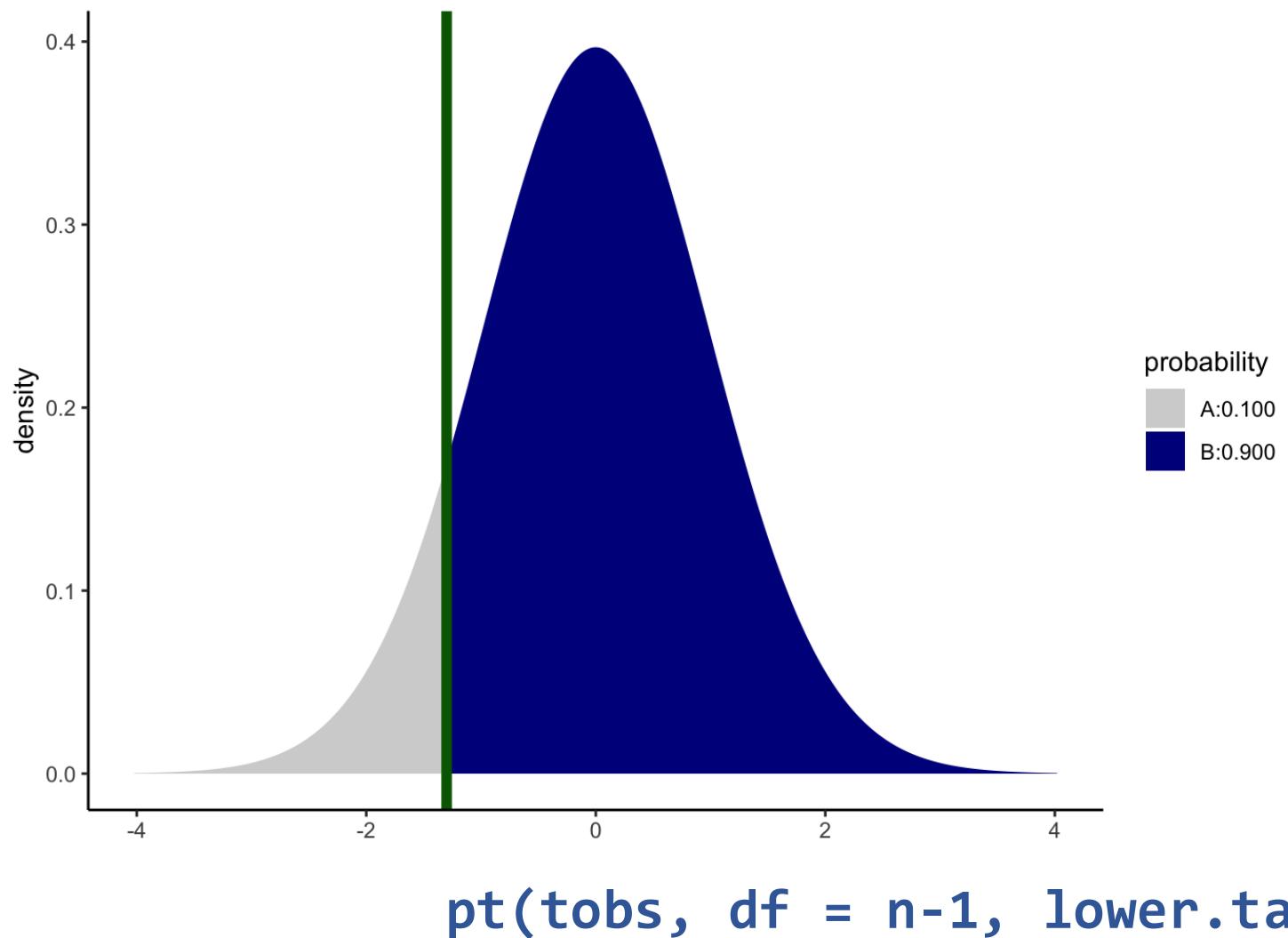
What if the observed t-statistic is negative?

If $H_1: \mu < \mu_0$ and $\text{tobs} = t = -1.3$, $\text{pvalue} = A$

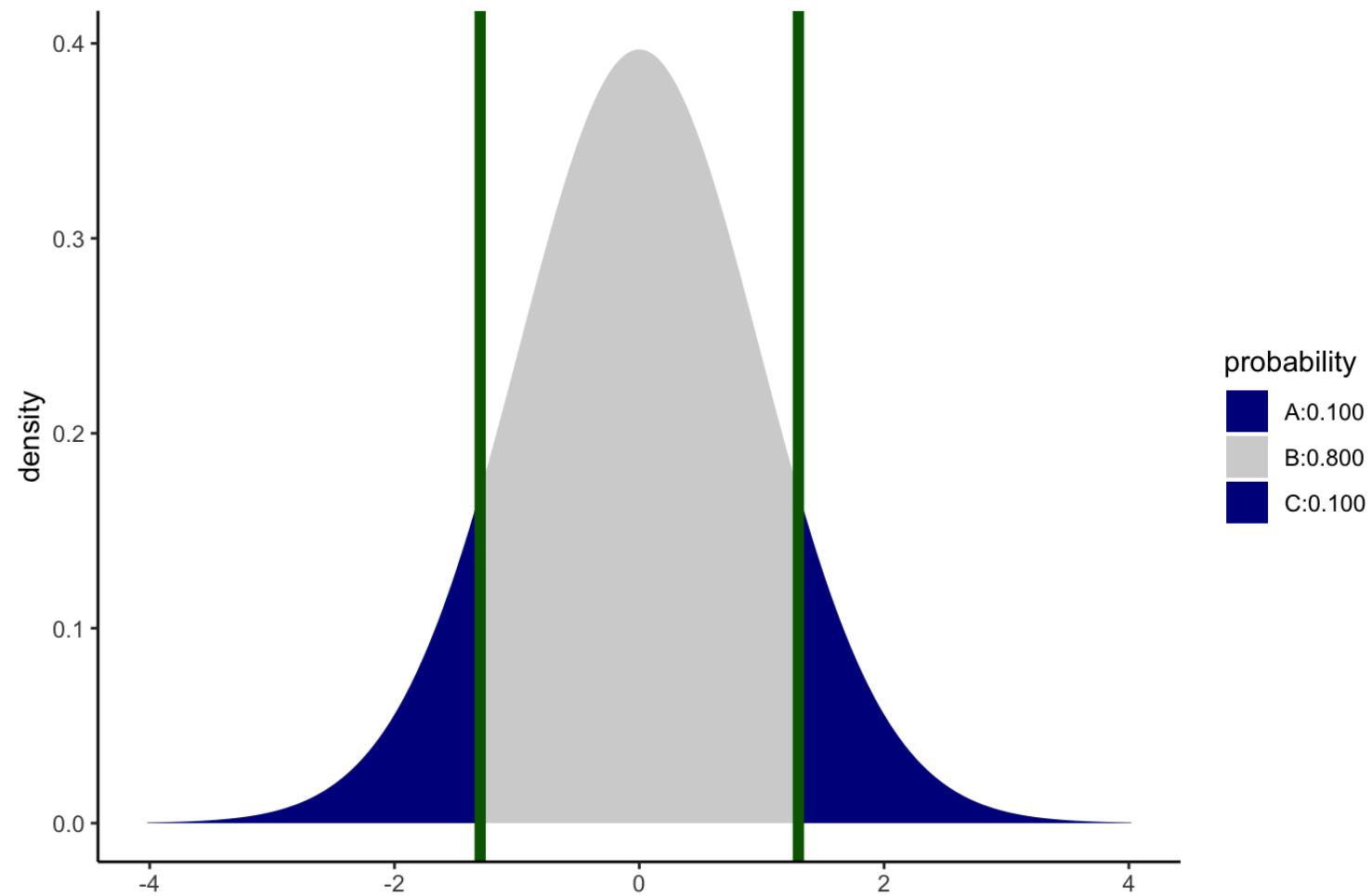


`pt(tobs, df = n-1, lower.tail = TRUE)`

If $H_1: \mu > \mu_0$ and tobs = t = -1.3, pvalue = B



If $H_1: \mu \neq \mu_0$ and $\text{tobs} = t = -1.3$, $\text{pvalue} = A+C$



`2 * pt(abs(tobs), df = n-1, lower.tail = FALSE)`