

1. What is the area under the standard normal curve to the left of -1.96? (Use the qnorm function in R)
2. What is the area under the standard normal curve to the left of 1.96? (use the qnorm function)
3. What is the area under the standard normal curve to the right of 1.96? (use qnorm)
4. What value cuts off an area .1 to it's left under the standard normal curve? (use the pnorm function)
5. What value cuts off an area .1 to it's right under the standard normal curve? (use pnorm)
6. What is the probability that a t random variable with 6 degrees of freedom is less than -1.9?
7. What is the probability that a t random variable with 6 degrees of freedom is less than 1.9?
8. What is the probability that a t random variable with 6 degrees of freedom is greater than 1.9?
9. What is the probability that an F random variable with 3 numerator and 7 denominator degrees of freedom is less than 4.3?
10. What is the probability that an F random variable with 3 numerator and 7 denominator degrees of freedom is greater than 4.3?
11. midterm W2022, question 2c)

The following table gives the information necessary to calculate the p-value. What is the p-value?

pt(-1.482, 10)	pt(1.482, 10)	pt(-1.482, 9)	pt(1.482, 9)
0.0846	0.9154	0.0862	0.9138
pt(-1.482, 8)	pt(1.482, 8)		
0.0883	0.9117		

12. midterm W2022, question 4

The following table gives the information necessary to calculate the p-value. What is the p-value?

pf(30,2,27)	1-pf(30,2,27)	pf(30,27,2)	1-pf(30,27,2)
1.000000	0.000000	0.967256	0.032744

13. midterm W2023, question 2b.

The following question gives the information necessary to calculate the p-value. What is the p-value?

pnorm(2.40)	1-pnorm(2.40)
.992	.008

14. A pooled t confidence interval was calculated. The difference of means was 6, and the pooled estimate of standard deviation was 3. The two sample sizes were 5 and 7. Using the following table, what is the 95% confidence interval for the difference of means?

qt(.025,12)	qt(.025,11)	qt(.025,10)	qt(.05,12)
-2.1788	-2.2010	-2.2281	-1.7823
qt(.05,11)	qt(.05,10)		
-1.7959	-1.8125		