

12.5: Facts About the F Distribution

1. The curve is not symmetrical but skewed to the right.
2. There is a different curve for each set of degrees of freedom.
3. The F statistic is greater than or equal to zero.
4. As the degrees of freedom for the numerator and for the denominator get larger, the curve approximates the normal as can be seen in the two figures below. Figure (b) with more degrees of freedom is more closely approaching the normal distribution, but remember that the F cannot ever be less than zero so the distribution does not have a tail that goes to infinity on the left as the normal distribution does.
5. Other uses for the F distribution include comparing two variances and two-way Analysis of Variance. TwoWay Analysis is beyond the scope of this chapter.

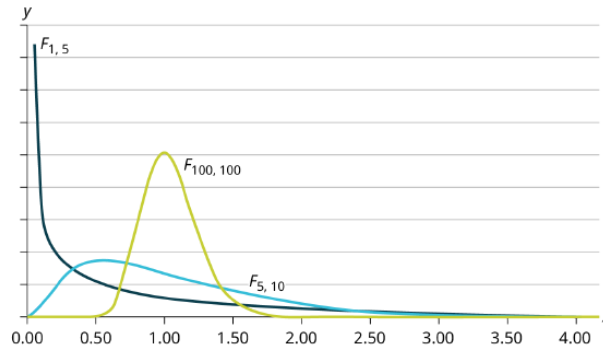


Figure 12.5.1

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