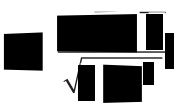
Testing the Significance of Pearson's ρ

In addition to the estimate of the linear relationship between two numerical variables X and Y using the correlation coefficient Pearson's r, you can also draw an inference about the true linear relationship between X and Y, that is, you draw inferences about



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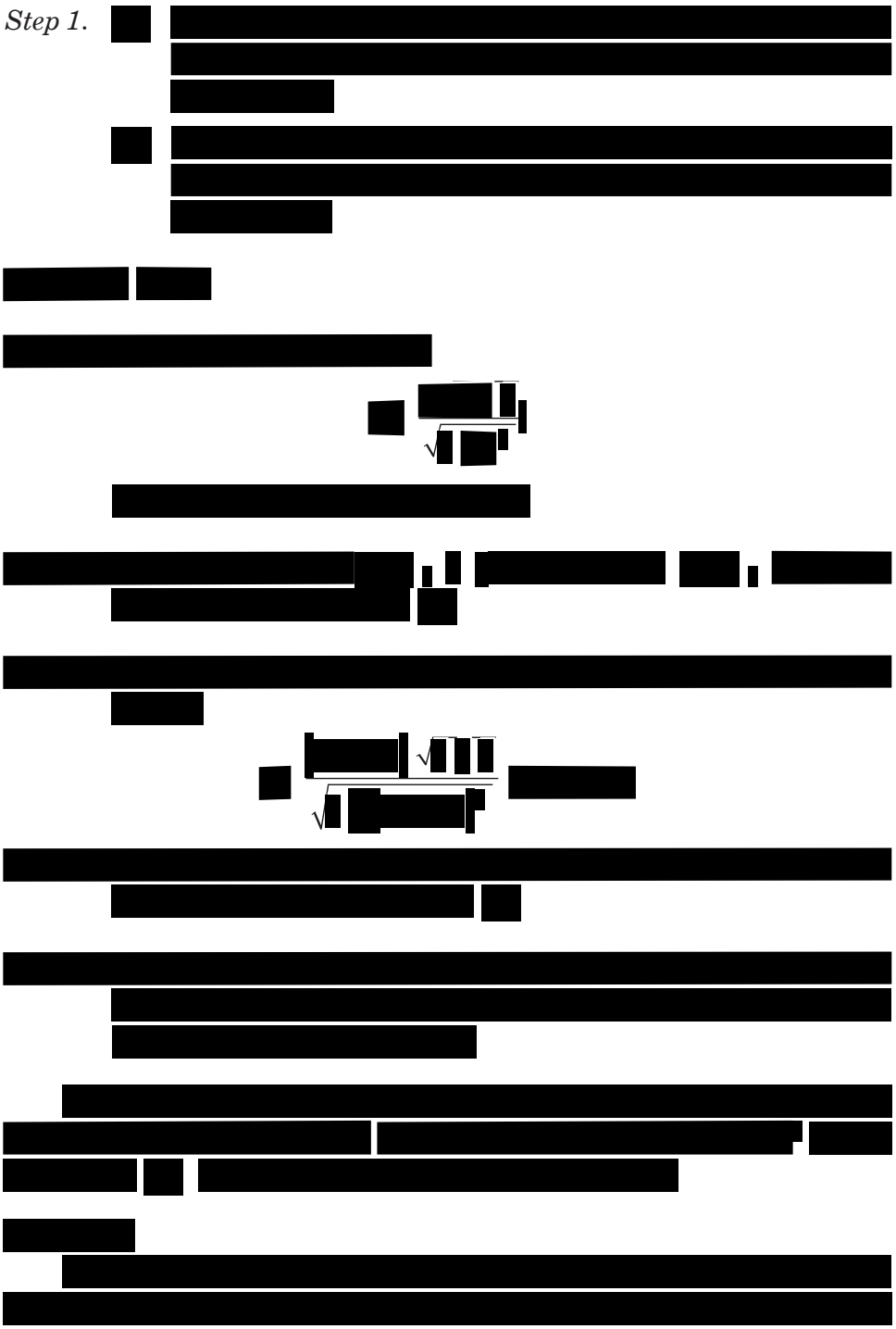
Thus, the test of significance of Pearson's population correlation coefficient ρ produces the following:

Step 1.



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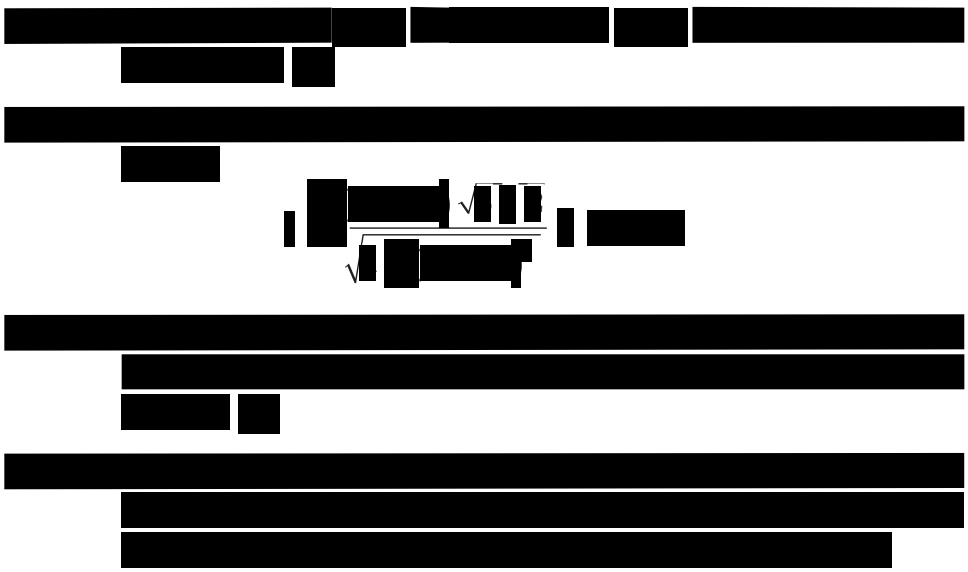

Note that the *p*-value associated with the computed test statistic, which is 1.2304, is 0.2646. Since *p*-value > α, that is 0.2646 > 0.05, then you fail to reject *Ho* and you arrive at the same conclusion.