On September 16-17, 2014, an NBC News/Marist Poll surveyed a random sample of 606 American adults. Respondents were asked the following question: "Do you think it is right or wrong for parents to discipline their children by striking them - either with a paddle, switch, or belt?" You can use either Fisher's exact test or a chi-square test to determine that the results of this poll provide statistical evidence the proportion of American adults that feel this form of discipline is right differs across gender. Now, to determine how much these proportions differ, you will construct a confidence interval for the difference in proportions. The data are shown in the following table.

	Right	Not Right	*Totals*
Men	119	178	297
Women	87	222	309
Totals	206	400	606

1. Estimate the difference in proportions.

   $\hat{\pi}_{\text{Right}|\text{Men}} - \hat{\pi}_{\text{Right}|\text{Women}} = 119/297 - 87/309 = .401 - .282 = .119 \text{ (or 11.9\%)}$

2. Find the standard error associated with this difference in proportions.

   $$\sqrt{\frac{.401(1-.401)}{297} + \frac{.282(1-.282)}{309}} = .038$$

3. Find the margin of error associated with this difference in proportions.

   For a 95% confidence interval, the margin of error is computed as follows:
   1.96 * standard error = 1.96(.038) = .075

4. Find the lower and upper endpoints of the confidence interval.

   Lower endpoint = .119 - .075 = .044
   Upper endpoint = .119 + .075 = .194

5. Write a sentence or two to interpret this confidence interval.

   We are 95% certain the true difference in proportions is between 4.44% and 19.4%. Or, we could say that we are 95% certain that the proportion of men that say this form of discipline is right is between 4.4 and 19.4 percentage points higher than the proportion of women that say it is right.