


# Question 4

A movie theater conducted a survey to determine the movie preferences of men and women. They asked a total of 130 adults (50 women and 80 men) to choose their favorite movie genre out of four choices: Action, Comedy, Horror, or Romance. The results of their survey are shown below.

	Women	Men
Action	12%	35%
Comedy	34%	25%
Horror	30%	32.50%
Romance	24%	7.50%

(1/1 point)

4a. Based on the above information, do **Gender** and **Movie** preferences appear to be independent?

☐ Yes☒ No [Show Answer](#)*You have used 1 of 1 submissions*

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(1/1 point)

4b. What is the probability that a randomly chosen person from the survey prefers **Action** films? (*Report as proportion rounded to 2 decimal places.*)

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(1 point possible)

4c. What is **P(Action | Women)**? (*Report as a proportion rounded to 2 decimal places.*)

0.31

**Answer:** 0.12[Hide Answer](#)*You have used 1 of 1 submissions***Help**

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