**Drill 3.2.4**

1. Each flip is independent of the last and the probability of any order of flips is just as likely as the next
   1. (0.5)^4 = 0.0625 = 6.25%

1. Because these events are mutually exclusive, the probability of choosing a woman is:
   1. 1-(21/45)=24/45

1. These are independent events and therefore you multiply their probabilities:
   1. 0.00005 \* 0.10 = 0.000005 = 0.0005%

1. The point of sampling data is to make an educated conclusion about the entire population. The types of uses that are more likely to click on the link or even likely to complete a survey, are not a proper evaluation of the larger population. They should prompt a percent of users that are simply browsing the site with the survey so it’s a better sample of the entire population.