

MATH 143: Introduction to Probability and Statistics

Worksheet 1A for Wed., Sept. 9

1. Place a checkmark next to those states that you have visited (or lived in, or even driven through), and total up the number of checkmarks.

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

2. Suppose that you have decided to see a play for which the admission charge is \$20 per ticket. As you prepare to purchase the ticket, you discover that you have lost a \$20 bill. Would you still pay for a ticket to see the play?
3. Social science researchers have conducted extensive empirical studies and concluded that the expression “absence makes the heart grow fonder” is generally true. Do you find this result surprising or not surprising?
4. Suppose that the United States is preparing for the outbreak of an unusual Asian disease which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:
 - If Program A is adopted, 200 people will be saved.
 - If Program B is adopted, there is a $\frac{1}{3}$ probability that all 600 people will be saved and a $\frac{2}{3}$ probability that none of the 600 people will be saved.

Which of the two programs would you favor?

5. Do you agree that Calvin College, during its January Series, should allow the invited speakers to express opinions even if they are not held by Calvin College? (If you do not know what the January Series is, please ask.)
6. Here are some special instructions for the question “Does your last name start with K, R or V?” Before answering, flip a coin. If the coin comes up ‘heads’, answer “yes” *even if this answer is untruthful*. If the coin comes up ‘tails’, answer truthfully.

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Worksheet 1B for Wed., Sept. 9

1. Place a checkmark next to those states that you have visited (or lived in, or even driven through), and total up the number of checkmarks.

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

2. Suppose that you have decided to see a play and paid the admission price of \$20 per ticket. As you prepare to enter the theater, you discover that you have lost the ticket. The seat was not marked, and the ticket cannot be recovered. Would you pay \$20 for another ticket?
3. Social science researchers have conducted extensive empirical studies and concluded that the expression “out of sight, out of mind” is generally true. Do you find this result surprising or not surprising?
4. Suppose that the United States is preparing for the outbreak of an unusual Asian disease which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:
 - If Program A is adopted, 400 people will die.
 - If Program B is adopted, there is a $\frac{1}{3}$ probability that none of the 600 people will die and a $\frac{2}{3}$ probability that all 600 will die.

Which of the two programs would you favor?

5. Do you agree that Calvin College should forbid January Series speakers from expressing opinions that are not held by the college? (If you do not know what the January Series is, please ask.)
6. Here are some special instructions for the question “Does your last name start with K, R or V?” Before answering, flip a coin. If the coin comes up ‘heads’, answer “yes” *even if this answer is untruthful*. If the coin comes up ‘tails’, answer truthfully.