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Homework

Please answer the following questions. Be sure that you have downloaded the associated Excel file before beginning the homework. This lesson uses the **JulyMVSDHW.xlsx** file.

*Remember that homework counts for 20% of your final grade. You are allowed **unlimited** attempts per question for homework problems. The main goal of homework is for you to practice and learn how to apply what you've learned in the content without worrying about getting the problem right the first time. Some homework problems may also provide hints or advice. Have fun!*

M3L2HW1

1/1 point (graded)

When a roulette wheel is spun, the possible outcomes are 0, 00, 1, 2, ..., 36. If you bet on a number, you win \$35 if your number wins, and you lose \$1 otherwise.

What is the mean and standard deviation of your winnings on a single play of the game?

☒ $m = -0.053$, $\text{stddev} = 5.8$ ✓

☐ $m = -0.055$, $\text{stddev} = 6.0$

☐ $m = 0.053$, $\text{stddev} = 5.8$

☒ $m = 0.055$, $\text{stddev} = 6.0$

Submit

✓ Correct (1/1 point)

M3L2HW2

1/1 point (graded)

A stock currently sells for \$40. In the next month, there is a 60% chance that the stock price will double, and a 40% chance that the stock will drop 50%. In a month, you will sell the stock.

Find the mean and standard deviation of your profit (in dollars).

☐ $m = \$15.00$, $\text{stddev} = \$29.15$

☒ $m = \$16.00$, $\text{stddev} = \$29.39$ ✓

☐ $m = \$17.00$, $\text{stddev} = \$29.50$

☐ $m = \$18.00$, $\text{stddev} = \$29.79$

Submit

✓ Correct (1/1 point)

M3L2HW3

1/1 point (graded)

When a roulette wheel is spun, the possible outcomes are 0, 00, 1, 2, ..., 36. Suppose you bet on an odd number coming up in roulette. If an odd number comes up, you win \$1, and if an odd number does not come up, you lose \$1. HINT: The probability of an odd number is not the same as the probability of an even number.

Find the mean and standard deviation of your profit.

☐ $m = 0.053$, $\text{stddev} = 0.999$

☐ $m = 0.063$, $\text{stddev} = 0.899$

☒ $m = -0.053$, $\text{stddev} = 0.999$ ✓

☐ $m = -0.063$, $\text{stddev} = 0.899$

Submit

✓ Correct (1/1 point)

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