edX

Homework

Please answer the following questions. Be sure that you have downloaded the associated Excel file before beginning the homework. This lesson uses the **JulyCentralLimitHW.xlsx** file. In each problem, assume all relevant random variables are independent.

*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!*

M3L7HW1

1/1 point (graded)
The probability of winning a game of craps is 0.493.

If I play 10,000 games of craps and bet the same amount on each game, what is the probability that I'm not losing money?

○ 6%

◉ 8% ✔

    ○ 10%

    ○ 12%

Submit

✔ Correct (1/1 point)

M3L7HW2

1/1 point (graded)

Assume the mean daily percentage change in the Dow Jones Index is 0, with a standard deviation of 1.5 percent. Assume there are 252 trading days in a year.

What is the chance the Dow Jones Index increases by 20% or more during a year?

    ○ 17%

    ◉ 20% ✔

    ○ 22%

    ○ 25%

Submit

✔   Correct (1/1 point)

M3L7HW3

1/1 point (graded)

500 potential customers come to my candy store each day. Seventy percent of the customers buy no pieces of candy, 15 percent buy one piece, 10 percent buy two pieces, and 5 percent buy three pieces.

What is the chance that I sell at least 280 pieces of candy in a day?

- ○ 2%

- ○ 4%

- ◉ 6% ✔

- ○ 8%

Submit

✔ Correct (1/1 point)